

## **LLNL Livermore Site First Quarter 2010 Self-Monitoring Report**

The following is the first quarter 2010 self-monitoring data for the treatment facilities and Lake Haussmann at the Lawrence Livermore National Laboratory (LLNL) Livermore Site.

The volumes of ground water and soil vapor treated and volatile organic compound (VOC) mass removed during the first quarter of 2010 are presented in Tables 1 and 2, respectively. An historical summary of VOC volume and mass removed are presented in Tables 3 and 4, respectively.

Attachment A presents ground water treatment facility and extraction well (ground water and soil vapor) VOC, chromium, bioassay, turbidity and chloride analyses (Tables A-1 through A-5). Metals and radiological analyses are presented in Tables A-6 and A-7, respectively. During the first quarter of 2010, all effluent sample analyses were within acceptable discharge limits.

Self-monitoring reports for all treatment facilities are presented in Attachment B. Monthly volumes of ground water extracted are shown in Attachment B; however, instantaneous flow rates are not shown for wells that are now only used for sampling and are not continuously pumped. The monthly volume shown for these wells is the quantity of water evacuated for sampling purposes. Annual effluent samples were collected and submitted for EPA Method 624 and 625 analyses from facilities where these compounds have been previously detected in the influent. These compounds were not detected in any of the annual samples submitted for analyses. Monitoring data for Lake Haussmann are presented in Attachment C.

A map showing Livermore Site treatment areas and treatment facility locations, and ground water elevation contour maps showing hydraulic capture zones for hydrostratigraphic units (HSUs) 1B, 2, 3A, 3B, 4, and 5, are presented in Attachment D. The contour maps for the individual HSUs are based on data collected during January 2010.

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**Table 1. Volumes of ground water and soil vapor extracted and treated at the Livermore Site, January through March 2010.**

Treatment Area <sup>a</sup>	Month	Volume of ground water extracted (Kgal) <sup>b</sup>	Volume of vapor extracted (Kft <sup>3</sup> ) <sup>b</sup>
TFA	January	8,786	-
	February	8,247	-
	March	10,000	-
TFB	January	2,174	-
	February	2,293	-
	March	2,719	-
TFC	January	707	-
	February	1,704	-
	March	2,066	-
TFD	January	3,530	1,914
	February	3,506	1,709
	March	4,547	2,013
TFE	January	2,052	1,818
	February	1,860	1,978
	March	2,345	2,357
TFG	January	687	-
	February	585	-
	March	755	-
TFH	January	814	1,700
	February	755	1,729
	March	1,053	1,619
<b>TOTAL<sup>c</sup></b>		<b>61,185</b>	<b>16,837</b>

<sup>a</sup> Totals include ground water and soil vapor extracted from the following facilities:

TFA area: TFA, TFA-E, TFA-W

TFB area: TFB

TFC area: TFC, TFC-E, TFC-SE

TFD area: TFD, TFD-E, TFD-HPD, TFD-S, TFD-SE, TFD-SS, TFD-W, VTFD-ETCS, VTFD-HPD, VTFD-HS

TFE area: TFE-E, TFE-HS, TFE-NW, TFE-SE, TFE-SW, TFE-W, VTFE-ELM, VTFE-HS

TFG area: TFG-1, TFG-N

TFH area: TF406, TF406-NW, TF518-N, TF518-PZ, TF5475-1, TF5475-2, TF5475-3, VTF406-HS, VTF511, VTF518-PZ, VTF5475

TFF started operation in February 1993 for fuel hydrocarbon remediation. In August 1995, the regulatory agencies agreed that the vadose zone remediation was complete, and in October 1996 a No Further Action status was granted for the ground water.

<sup>b</sup> Totals are derived from individual extraction wells shown in Attachment B

<sup>c</sup> Rounded number

Kft<sup>3</sup> = thousands of cubic feet

Kgal = thousands of gallons

**Table 2. VOC mass removed at the Livermore Site, January through March 2010.**

<b>Treatment Area<sup>a</sup></b>	<b>VOC mass removed from ground water (kg)</b>	<b>VOC mass removed from soil vapor (kg)</b>	<b>Total VOC mass removed (kg) <sup>b</sup></b>
<b>TFA</b>	<b>1.2</b>	<b>-</b>	<b>1.2</b>
<b>TFB</b>	<b>0.6</b>	<b>-</b>	<b>0.6</b>
<b>TFC</b>	<b>0.8</b>	<b>-</b>	<b>0.8</b>
<b>TFD</b>	<b>5.4</b>	<b>1.1</b>	<b>6.5</b>
<b>TFE</b>	<b>1.8</b>	<b>1.4</b>	<b>3.2</b>
<b>TFG</b>	<b>0.2</b>	<b>-</b>	<b>0.2</b>
<b>TFH</b>	<b>0.8</b>	<b>6.5</b>	<b>7.3</b>
<b>TOTAL<sup>b</sup></b>	<b>10.8</b>	<b>9.0</b>	<b>19.8</b>

**Table 3. Historical summary of volumes of water and soil vapor removed at the Livermore Site through March 2010.**

<b>Treatment Area<sup>a</sup></b>	<b>Volume of ground water extracted (Mgal)</b>	<b>Volume of vapor extracted (Kft<sup>3</sup>)</b>
<b>TFA</b>	<b>1,668</b>	<b>-</b>
<b>TFB</b>	<b>393</b>	<b>-</b>
<b>TFC</b>	<b>404</b>	<b>-</b>
<b>TFD</b>	<b>876</b>	<b>63,652</b>
<b>TFE</b>	<b>324</b>	<b>138,710</b>
<b>TFG</b>	<b>65</b>	<b>-</b>
<b>TFH</b>	<b>143</b>	<b>186,882</b>
<b>TOTAL<sup>b</sup></b>	<b>3,873</b>	<b>389,244</b>

**Table 4. Historical summary of VOC mass removed from water and soil vapor at the Livermore Site through March 2010.**

<b>Treatment Area<sup>a</sup></b>	<b>VOC mass removed from ground water (kg)</b>	<b>VOC mass removed from soil vapor (kg)</b>	<b>Total VOC mass removed (kg) <sup>b</sup></b>
<b>TFA</b>	<b>199</b>	<b>-</b>	<b>199</b>
<b>TFB</b>	<b>75</b>	<b>-</b>	<b>75</b>
<b>TFC</b>	<b>94</b>	<b>-</b>	<b>94</b>
<b>TFD</b>	<b>794</b>	<b>88</b>	<b>882</b>
<b>TFE</b>	<b>202</b>	<b>144</b>	<b>346</b>
<b>TFG</b>	<b>10</b>	<b>-</b>	<b>10</b>
<b>TFH</b>	<b>33</b>	<b>1,169</b>	<b>1,202</b>
<b>TOTAL<sup>b</sup></b>	<b>1,407</b>	<b>1,401</b>	<b>2,808</b>

<sup>a</sup> Refer to Table 1 footnote for facilities in each treatment facility area.<sup>b</sup> Rounded number.

Abbreviations for Tables 2, 3 and 4:

Kft<sup>3</sup> = thousands of cubic feet.

Kg = Kilograms.

Mgal = millions of gallons.

VOC = Volatile organic compound.

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**Attachment A**

**VOC, Chromium, Bioassay,  
Turbidity, Chloride Analyses, Metals, and  
Radiological Analyses**

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Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CCl <sub>4</sub> <-	CHCl <sub>3</sub> -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
<b>TFA</b>													
TFA-I001	04-JAN-10	E624	<1	<b>1.1</b>	<1	<1	<b>1.6</b>	<1	<1	<b>7.6</b>	<1	<b>0.73</b>	<1
TFA-I001	02-FEB-10	E601	<0.5	<b>1.2</b>	<b>0.74</b>	<0.5	<b>1.6</b>	<1	<0.5	<b>8</b>	<0.5	<b>0.81</b>	<0.5
TFA-I001	01-MAR-10	E601	<0.5	<b>1</b>	<b>0.65</b>	<0.5	<b>1.3</b>	<1	<0.5	<b>7.6</b>	<0.5	<b>0.77</b>	<0.5
<b>TFA-E</b>													
TFA-E001	04-JAN-10	E624	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1
TFA-E001	02-FEB-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFA-E001	01-MAR-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFA-E</b>													
W-254	06-JAN-10	E601	<0.5	<0.5	<0.5	<0.5	<b>0.71</b>	<1	<0.5	<b>42</b>	<0.5	<b>1.3</b>	<0.5
STU06-I	03-FEB-10	E601	<0.5	<0.5	<0.5	<0.5	<b>0.63</b>	<1	<0.5	<b>44</b>	<0.5	<b>1.1</b>	<0.5
STU06-I	02-MAR-10	E601	<0.5	<0.5	<0.5	<0.5	<b>0.56</b>	<1	<0.5	<b>43</b>	<0.5	<b>1.2</b>	<0.5
<b>TFA-E</b>													
STU06-E	06-JAN-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
STU06-E	03-FEB-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
STU06-E	02-MAR-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFA-W<sup>a</sup></b>													
W-404	21-JAN-10	E601	<0.5	<0.5	<b>1.5</b>	<0.5	<b>2.6</b>	<1	<0.5	<b>11</b>	<0.5	<b>0.5</b>	<0.5
W-404	18-FEB-10	E601	<0.5	<0.5	<b>1.6</b>	<0.5	<b>2.7</b>	<1	<0.5	<b>10</b>	<0.5	<0.5	<0.5
W-404	15-MAR-10	E601	<0.5	<0.5	<b>1.5</b>	<0.5	<b>2.6</b>	<1	<0.5	<b>10</b>	<0.5	<b>0.52</b>	<0.5
TFA-W-E	21-JAN-10	E624	<1	<1	<b>1.6</b>	<1	<b>2.7</b>	<1	<1	<b>10</b>	<1	<0.5	<1
<b>TFB</b>													
TFB-I002	04-JAN-10	E601	<b>0.52</b>	<b>2</b>	<0.5	<0.5	<b>1.6</b>	<1	<b>3.6</b>	<b>1.5</b>	<0.5	<b>13</b>	<0.5
TFB-I002	02-FEB-10	E601	<b>0.59</b>	<b>2.2</b>	<0.5	<0.5	<b>1.7</b>	<1	<b>4.5</b>	<b>1.7</b>	<0.5	<b>14</b>	<0.5
TFB-I002	01-MAR-10	E601	<b>0.6</b>	<b>2.3</b>	<0.5	<0.5	<b>1.6</b>	<1	<b>4.2</b>	<b>1.8</b>	<0.5	<b>16</b>	<0.5
<b>TFB-E</b>													
TFB-E002	04-JAN-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFB-E002	02-FEB-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFB-E002	01-MAR-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFC</b>													
TFC-I003	29-JAN-10	E601	<0.5	<b>0.52</b>	<0.5	<0.5	<0.5	<1	<b>2.4</b>	<b>4.4</b>	<0.5	<b>8.7</b>	<0.5
TFC-I003	10-FEB-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC-I003	01-MAR-10	E601	<0.5	<b>0.59</b>	<0.5	<0.5	<b>0.58</b>	<1	<b>2.3</b>	<b>4</b>	<0.5	<b>7.8</b>	<0.5
TFC-E003	29-JAN-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CCl <sub>4</sub> <-	CHCl <sub>3</sub> -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
<b>TFC (cont.)</b>													
TFC-E003	10-FEB-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC-E003	01-MAR-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFC-E<sup>b</sup></b>													
MTU1-I	02-FEB-10	E601	<0.5	<b>16</b>	<0.5	<0.5	<b>1.2</b>	<1	<b>14</b>	<b>0.79</b>	<0.5	<b>9.6</b>	<b>4.7</b>
MTU1-I	03-MAR-10	E601	<0.5	<b>17</b>	<0.5	<0.5	<b>1.1</b>	<1	<b>12</b>	<b>0.67</b>	<0.5	<b>9.8</b>	<b>4.6</b>
MTU1-E	02-FEB-10	E601	<0.5	<b>0.71</b>	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU1-E	03-MAR-10	E601	<0.5	<b>0.56</b>	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFC-SE</b>													
PTU1-I	05-JAN-10	E601	<0.5	<b>6.6</b>	<0.5	<0.5	<b>3.5</b>	<1	<b>14</b>	<0.5	<0.5	<b>20</b>	<b>0.89</b>
PTU1-I	02-FEB-10	E601	<0.5	<b>6.7</b>	<0.5	<0.5	<b>4</b>	<1	<b>18</b>	<b>0.55</b>	<0.5	<b>20</b>	<b>0.95</b>
PTU1-I	02-MAR-10	E601	<0.5	<b>5.7</b>	<0.5	<0.5	<b>3.8</b>	<1	<b>18</b>	<b>0.58</b>	<0.5	<b>19</b>	<b>0.89</b>
PTU1-E	05-JAN-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU1-E	02-FEB-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU1-E	02-MAR-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFD</b>													
TFD-I004	05-JAN-10	E601	<b>2.3</b>	<b>1.9</b>	<0.5	<0.5	<b>2.2</b>	<1	<b>0.52</b>	<b>3</b>	<0.5	<b>69</b>	<b>30</b>
TFD-I004	01-FEB-10	E601	<b>3</b>	<b>2</b>	<0.5	<0.5	<b>1.6</b>	<1	<b>0.68</b>	<b>2.2</b>	<0.5	<b>70</b>	<b>41</b>
TFD-I004	19-MAR-10	E601	<b>1.9</b>	<b>1.8</b>	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<b>32</b>	<b>66</b>
TFD-E004	05-JAN-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-E004	01-FEB-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-E004	19-MAR-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFD-E</b>													
PTU8-I	06-JAN-10	E601	<b>3.6</b>	<b>2.2</b>	<b>0.64</b>	<b>1.6</b>	<b>9.5</b>	<1	<0.5	<b>11</b>	<0.5	<b>110</b>	<0.5
PTU8-I	01-FEB-10	E601	<b>4.5</b>	<b>2.4</b>	<b>0.65</b>	<b>1.6</b>	<b>11</b>	<1	<0.5	<b>16</b>	<0.5	<b>100</b>	<0.5
PTU8-I	02-MAR-10	E601	<b>4.6</b>	<b>2.4</b>	<0.5	<b>0.87</b>	<b>7</b>	<1	<b>0.5</b>	<b>12</b>	<0.5	<b>87</b>	<0.5
PTU8-E	06-JAN-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU8-E	01-FEB-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU8-E	02-MAR-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CCl <sub>4</sub> <-	CHCl <sub>3</sub> -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
<b>TFD-HPD</b>													
PTU10-I	13-JAN-10	E601	<b>2.2</b>	<b>0.63</b>	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<b>53</b>	<0.5
PTU10-I	03-FEB-10	E601	<b>2.5</b>	<b>0.6</b>	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<b>53</b>	<0.5
PTU10-I	03-MAR-10	E601	<b>2.3</b>	<b>0.58</b>	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<b>49</b>	<0.5
PTU10-E	13-JAN-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU10-E	03-FEB-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU10-E	03-MAR-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFD-S</b>													
PTU2-I	20-JAN-10	E601	<b>1.3</b>	<b>1.6</b>	<0.5	<0.5	<b>6.2</b>	<1	<b>1.4</b>	<b>7.5</b>	<0.5	<b>81</b>	<0.5
PTU2-I	11-FEB-10	E601	<0.5	<0.5	<0.5	<0.5	<b>6.4</b>	<1	<b>1.5</b>	<b>10</b>	<0.5	<b>53</b>	<0.5
PTU2-I	03-MAR-10	E601	<b>1.3</b>	<b>2</b>	<0.5	<0.5	<b>6.1</b>	<1	<b>1.4</b>	<b>7.7</b>	<0.5	<b>83</b>	<0.5
PTU2-E	20-JAN-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU2-E	11-FEB-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU2-E	03-MAR-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFD-SE</b>													
PTU11-I	06-JAN-10	E601	<0.5	<b>1.6</b>	<b>1.8</b>	<b>5.9</b>	<b>22</b>	<b>1.2</b>	<0.5	<b>100</b>	<0.5	<b>180</b>	<0.5
PTU11-I	03-FEB-10	E601	<0.5	<b>0.51</b>	<b>1.2</b>	<b>1.3</b>	<b>5.2</b>	<1	<0.5	<b>22</b>	<0.5	<b>42</b>	<0.5
PTU11-I	02-MAR-10	E601	<0.5	<b>2.3</b>	<b>0.93</b>	<b>1.6</b>	<b>7.6</b>	<1	<b>0.95</b>	<b>29</b>	<0.5	<b>74</b>	<0.5
PTU11-E	06-JAN-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU11-E	03-FEB-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU11-E	02-MAR-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFD-SS</b>													
PTU12-I	19-JAN-10	E601	<b>0.68</b>	<b>3.1</b>	<b>2</b>	<b>5.9</b>	<b>26</b>	<b>2.4</b>	<0.5	<b>41</b>	<0.5	<b>280</b>	<b>8.7</b>
PTU12-I	11-FEB-10	E601	<b>1.5</b>	<b>2.1</b>	<b>1.2</b>	<b>5</b>	<b>17</b>	<b>1.2</b>	<0.5	<b>23</b>	<0.5	<b>180</b>	<b>10</b>
PTU12-I	11-MAR-10	E601	<b>1.6</b>	<b>2</b>	<b>0.65</b>	<b>2.1</b>	<b>8.9</b>	<1	<0.5	<b>16</b>	<0.5	<b>100</b>	<b>19</b>
PTU12-E	19-JAN-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU12-E	11-FEB-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU12-E	11-MAR-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFD-W</b>													
PTU6-I	11-JAN-10	E601	<b>0.56</b>	<b>3.8</b>	<0.5	<0.5	<0.5	<1	<b>0.5</b>	<0.5	<0.5	<b>5.6</b>	<b>99</b>
PTU6-I	17-FEB-10	E601	<b>0.58</b>	<b>4.6</b>	<0.5	<0.5	<0.5	<1	<b>0.76</b>	<0.5	<0.5	<b>5.2</b>	<b>100</b>
PTU6-I	15-MAR-10	E601	<0.5	<b>4.5</b>	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<b>4.5</b>	<b>49</b>

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CCl <sub>4</sub> <-	CHCl <sub>3</sub> -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
<b>TFD-W (cont.)</b>													
PTU6-E	11-JAN-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU6-E	17-FEB-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU6-E	15-MAR-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFE-E</b>													
PTU3-I	13-JAN-10	E601	<0.5	<b>3.2</b>	<0.5	<0.5	<b>15</b>	<1	<b>12</b>	<b>22</b>	<0.5	<b>94</b>	<0.5
PTU3-I	16-FEB-10	E601	<0.5	<b>3.4</b>	<0.5	<0.5	<b>49</b>	<1	<b>13</b>	<b>81</b>	<0.5	<b>200</b>	<0.5
PTU3-I	11-MAR-10	E601	<0.5	<b>3.1</b>	<0.5	<0.5	<b>51</b>	<1	<b>14</b>	<b>82</b>	<0.5	<b>170</b>	<0.5
PTU3-E	13-JAN-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU3-E	16-FEB-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU3-E	11-MAR-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFE-HS<sup>c</sup></b>													
GTU07-I	07-JAN-10	E601	<0.5	<b>0.77</b>	<0.5	<0.5	<b>6.4</b>	<1	<b>18</b>	<b>29</b>	<0.5	<b>300</b>	<0.5
GTU07-E	07-JAN-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFE-NW</b>													
PTU9-I	11-JAN-10	E601	<0.5	<b>2.3</b>	<0.5	<0.5	<0.5	<1	<b>1</b>	<0.5	<0.5	<b>9.3</b>	<0.5
PTU9-I	11-FEB-10	E601	<b>0.57</b>	<b>3</b>	<0.5	<0.5	<0.5	<1	<b>1.1</b>	<0.5	<0.5	<b>11</b>	<0.5
PTU9-I	03-MAR-10	E601	<0.5	<b>3</b>	<0.5	<0.5	<0.5	<1	<b>0.92</b>	<0.5	<0.5	<b>10</b>	<0.5
PTU9-E	11-JAN-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU9-E	11-FEB-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU9-E	03-MAR-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFE-SE</b>													
W-359	11-JAN-10	E601	<b>3.3</b>	<b>0.77</b>	<0.5	<0.5	<b>19</b>	<1	<b>7.6</b>	<b>8</b>	<0.5	<b>140</b>	<b>0.83</b>
MTU04-I	03-FEB-10	E601	<b>4.2</b>	<b>0.9</b>	<0.5	<0.5	<b>23</b>	<1	<b>7.6</b>	<b>9.1</b>	<0.5	<b>180</b>	<b>1.2</b>
MTU04-I	02-MAR-10	E601	<b>4.4</b>	<b>0.94</b>	<0.5	<0.5	<b>22</b>	<1	<b>7</b>	<b>9.1</b>	<0.5	<b>200</b>	<b>1.2</b>
MTU04-E	11-JAN-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU04-E	03-FEB-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU04-E	02-MAR-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFE-SW</b>													
MTU03-I	13-JAN-10	E601	<0.5	<b>0.75</b>	<0.5	<0.5	<b>1.8</b>	<b>3.3</b>	<b>0.94</b>	<b>0.7</b>	<0.5	<b>15</b>	<0.5
MTU03-I	03-FEB-10	E601	<0.5	<b>0.68</b>	<0.5	<0.5	<b>1.6</b>	<b>2.7</b>	<b>0.75</b>	<b>0.71</b>	<0.5	<b>14</b>	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CCl <sub>4</sub> <-	CHCl <sub>3</sub> -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
<b>TFE-SW (cont.)</b>													
MTU03-I	03-MAR-10	E601	<0.5	<b>0.63</b>	<0.5	<0.5	<b>1.5</b>	<b>2.6</b>	<b>0.82</b>	<b>0.7</b>	<0.5	<b>13</b>	<0.5
MTU03-E	13-JAN-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU03-E	03-FEB-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU03-E	03-MAR-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFE-W</b>													
MTU05-I	14-JAN-10	E601	<0.5	<b>1.1</b>	<0.5	<0.5	<b>2.8</b>	<b>1.6</b>	<b>14</b>	<b>5.7</b>	<0.5	<b>32</b>	<0.5
MTU05-I	03-FEB-10	E601	<0.5	<b>1.1</b>	<0.5	<0.5	<b>2.5</b>	<b>1.5</b>	<b>12</b>	<b>5.8</b>	<0.5	<b>32</b>	<b>0.51</b>
MTU05-I	03-MAR-10	E601	<0.5	<b>1</b>	<0.5	<0.5	<b>2.3</b>	<b>1.5</b>	<b>11</b>	<b>5.4</b>	<0.5	<b>32</b>	<0.5
MTU05-E	14-JAN-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU05-E	03-FEB-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU05-E	03-MAR-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFG-1</b>													
W-1111	14-JAN-10	E601	<b>3.5</b>	<b>11</b>	<0.5	<0.5	<b>1.4</b>	<1	<b>0.64</b>	<b>1.4</b>	<0.5	<b>4.4</b>	<0.5
GTU01-I	16-FEB-10	E601	<b>3</b>	<b>8.9</b>	<0.5	<0.5	<b>1</b>	<1	<0.5	<b>1.2</b>	<0.5	<b>3.9</b>	<0.5
GTU01-I	04-MAR-10	E601	<b>2.9</b>	<b>9.4</b>	<0.5	<0.5	<b>1.1</b>	<1	<b>0.51</b>	<b>1.2</b>	<0.5	<b>3.9</b>	<0.5
GTU01-E	14-JAN-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU01-E	16-FEB-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU01-E	04-MAR-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFG-N</b>													
MTU02-I	13-JAN-10	E601	<0.5	<b>5.2</b>	<0.5	<0.5	<b>0.98</b>	<1	<b>1.4</b>	<b>15</b>	<0.5	<b>4.7</b>	<0.5
MTU02-I	16-FEB-10	E601	<0.5	<b>4.5</b>	<0.5	<0.5	<b>0.88</b>	<1	<b>1.1</b>	<b>14</b>	<0.5	<b>4.4</b>	<0.5
MTU02-I	04-MAR-10	E601	<0.5	<b>4.2</b>	<0.5	<0.5	<b>0.92</b>	<1	<b>1.2</b>	<b>14</b>	<0.5	<b>4.5</b>	<0.5
MTU02-E	13-JAN-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU02-E	16-FEB-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU02-E	04-MAR-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TF406</b>													
PTU5-I	12-JAN-10	E601	<0.5	<b>0.63</b>	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<b>4.8</b>	<0.5
PTU5-I	11-FEB-10	E601	<0.5	<b>0.88</b>	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<b>8.1</b>	<0.5
PTU5-I	03-MAR-10	E601	<0.5	<b>0.76</b>	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<b>6.8</b>	<0.5
PTU5-E	12-JAN-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CCl <sub>4</sub> <-	CHCl <sub>3</sub> -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
<b>TF406 (cont.)</b>													
PTU5-E	11-FEB-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU5-E	03-MAR-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TF406-NW</b>													
W-1801	12-JAN-10	E601	<0.5	<b>1.9</b>	<0.5	<0.5	<0.5	<1	<b>6.2</b>	<b>0.71</b>	<0.5	<b>28</b>	<0.5
GTU03-I	11-FEB-10	E601	<0.5	<b>2.5</b>	<0.5	<0.5	<0.5	<1	<b>6.3</b>	<b>0.79</b>	<0.5	<b>33</b>	<0.5
GTU03-I	08-MAR-10	E601	<0.5	<b>2</b>	<0.5	<0.5	<0.5	<1	<b>6.9</b>	<b>0.79</b>	<0.5	<b>33</b>	<0.5
GTU03-E	12-JAN-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU03-E	11-FEB-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU03-E	08-MAR-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TF518-N<sup>d</sup></b>	---	---	--	--	--	--	--	--	--	--	--	--	--
<b>TF5475-1<sup>e</sup></b>	---	---	--	--	--	--	--	--	--	--	--	--	--
<b>TF5475-2</b>													
GTU09-I	06-JAN-10	E601	<b>1.8</b>	<b>20</b>	<b>0.64</b>	<b>2.4</b>	<b>18</b>	<1	<b>6.8</b>	<b>34</b>	<0.5	<b>310</b>	<0.5
GTU09-I	02-FEB-10	E601	<b>2</b>	<b>22</b>	<b>0.7</b>	<b>2.4</b>	<b>21</b>	<1	<b>8</b>	<b>35</b>	<0.5	<b>300</b>	<0.5
GTU09-I	03-MAR-10	E601	<b>1.7</b>	<b>17</b>	<b>0.5</b>	<b>2.1</b>	<b>16</b>	<1	<b>8.3</b>	<b>27</b>	<0.5	<b>200</b>	<0.5
GTU09-E	06-JAN-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU09-E	02-FEB-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU09-E	03-MAR-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TF5475-3<sup>f</sup></b>	---	---	--	--	--	--	--	--	--	--	--	--	--

Notes on following page.

**Table A-1. VOC analyses of influent and effluent samples by treatment facility.**

<sup>a</sup> TFA-W effluent is discharged to the Livermore Water Reclamation Plant in accordance with Permit #151OG (2006-2008). The discharge limit for Total Toxic Organics is 1.0 mg/L.

<sup>b</sup> TFC-E did not operate during January due to resin columns requiring conditioning.

<sup>c</sup> TFE-HS did not operate during February and March due to pump and controller replacement.

<sup>d</sup> TF518-N did not operate during this reporting period due to mixed waste disposition issues.

<sup>e</sup> TF5475-1 did not operate during this reporting period due to mixed waste disposition issues.

<sup>f</sup> TF5475-3 did not operate during this reporting period due to mixed waste disposition issues.

Notes:

CCl<sub>4</sub> = Carbon tetrachloride

CHCl<sub>3</sub> = Chloroform

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCl <sub>4</sub> <-	CHCl <sub>3</sub> -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
<b>TFA</b>													
W-109	11-JAN-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<b>1.9</b>	<0.5	<0.5	<0.5
W-262 <sup>a</sup>	29-JAN-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<b>0.56</b>	<0.5	<0.5	<0.5
W-408	11-JAN-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<b>0.72</b>	<0.5	<0.5	<0.5
W-415	11-JAN-10	E601	<0.5	<b>0.97</b>	<b>0.86</b>	<0.5	<b>1.8</b>	<1	<0.5	<b>12</b>	<0.5	<b>1.1</b>	<0.5
W-457	11-JAN-10	E601	<0.5	<0.5	<b>1.1</b>	<0.5	<b>1.2</b>	<1	<0.5	<b>7.9</b>	<0.5	<b>0.52</b>	<0.5
W-518 <sup>a</sup>	24-APR-08	E601	<0.5	<0.5	<b>7.3</b>	<0.5	<b>4</b>	<1	<0.5	<b>6.3</b>	<0.5	<b>0.67</b>	<0.5
W-522 <sup>a</sup>	24-APR-08	E601	<0.5	<0.5	<b>2.3</b>	<0.5	<b>1.5</b>	<1	<0.5	<b>3.5</b>	<0.5	<0.5	<0.5
W-605	11-JAN-10	E601	<0.5	<b>0.52</b>	<b>1.5</b>	<0.5	<b>1.8</b>	<1	<0.5	<b>20</b>	<0.5	<b>1</b>	<0.5
W-614	11-JAN-10	E601	<0.5	<b>0.69</b>	<0.5	<0.5	<0.5	<1	<0.5	<b>8.1</b>	<0.5	<0.5	<0.5
W-712	11-JAN-10	E601	<b>3</b>	<b>2.9</b>	<b>1.2</b>	<0.5	<b>3.9</b>	<1	<0.5	<b>1.8</b>	<0.5	<b>3.5</b>	<0.5
W-714	11-JAN-10	E601	<0.5	<0.5	<0.5	<0.5	<b>0.51</b>	<1	<0.5	<b>10</b>	<0.5	<0.5	<0.5
W-903 <sup>a</sup>	29-JAN-08	E601	<0.5	<0.5	<b>1.8</b>	<0.5	<b>1.4</b>	<1	<0.5	<b>7.5</b>	<0.5	<b>0.52</b>	<0.5
W-904	02-FEB-10	E601	<0.5	<0.5	<b>1.1</b>	<0.5	<b>1.6</b>	<1	<0.5	<b>9.1</b>	<0.5	<0.5	<0.5
W-1001	02-FEB-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
W-1004	11-JAN-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<b>3.9</b>	<0.5	<0.5	<0.5
W-1009	11-JAN-10	E601	<b>1.3</b>	<b>5.2</b>	<b>0.91</b>	<0.5	<b>3.8</b>	<1	<b>0.65</b>	<b>13</b>	<0.5	<b>2</b>	<0.5
<b>TFA-E</b>													
W-254	06-JAN-10	E601	<0.5	<0.5	<0.5	<0.5	<b>0.71</b>	<1	<0.5	<b>42</b>	<0.5	<b>1.3</b>	<0.5
<b>TFA-W</b>													
W-404	15-MAR-10	E601	<0.5	<0.5	<b>1.5</b>	<0.5	<b>2.6</b>	<1	<0.5	<b>10</b>	<0.5	<b>0.52</b>	<0.5
<b>TFB</b>													
W-357	04-JAN-10	E601	<b>1.6</b>	<b>2.6</b>	<0.5	<0.5	<b>1.8</b>	<1	<b>5.7</b>	<b>1.2</b>	<0.5	<b>37</b>	<0.5
W-610	04-JAN-10	E601	<0.5	<0.5	<0.5	<0.5	<b>2</b>	<1	<b>2.5</b>	<b>0.92</b>	<0.5	<b>2.4</b>	<0.5
W-620	04-JAN-10	E601	<0.5	<b>1.4</b>	<0.5	<0.5	<b>1.9</b>	<1	<b>2.6</b>	<b>1.4</b>	<0.5	<b>5.3</b>	<0.5
W-621	04-JAN-10	E601	<0.5	<b>0.7</b>	<0.5	<0.5	<b>0.64</b>	<1	<b>1.3</b>	<0.5	<0.5	<b>3.8</b>	<0.5
W-655	04-JAN-10	E601	<0.5	<b>0.78</b>	<0.5	<0.5	<0.5	<1	<b>3.3</b>	<0.5	<0.5	<b>2.4</b>	<0.5
W-704	04-JAN-10	E601	<b>0.59</b>	<b>3.4</b>	<0.5	<0.5	<b>2.4</b>	<1	<b>5.7</b>	<b>3</b>	<0.5	<b>21</b>	<0.5
W-1423	04-JAN-10	E601	<b>0.77</b>	<b>4.8</b>	<0.5	<0.5	<b>3.8</b>	<1	<b>3.7</b>	<b>1.7</b>	<0.5	<b>8.7</b>	<0.5
<b>TFC</b>													
W-701 <sup>a</sup>	12-OCT-09	E601	<0.5	<b>2.2</b>	<0.5	<0.5	<b>1.9</b>	<1	<b>34</b>	<b>0.59</b>	<0.5	<b>11</b>	<0.5
W-1015	10-FEB-10	E601	<0.5	<b>0.56</b>	<0.5	<0.5	<b>1.3</b>	<1	<b>2.4</b>	<b>1.2</b>	<0.5	<b>6.5</b>	<0.5
W-1102 <sup>a</sup>	06-JUL-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<b>8</b>	<0.5	<0.5	<b>2.4</b>	<0.5
W-1103	10-FEB-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<b>1.6</b>	<0.5
W-1104	10-FEB-10	E601	<0.5	<b>0.54</b>	<0.5	<0.5	<0.5	<1	<b>1.9</b>	<b>5.6</b>	<0.5	<b>9.4</b>	<0.5
W-1116	10-FEB-10	E601	<0.5	<b>0.67</b>	<0.5	<0.5	<0.5	<1	<b>5.7</b>	<b>1.9</b>	<0.5	<b>4</b>	<0.5



Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCl <sub>4</sub> <-	CHCl <sub>3</sub> -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
<b>TFC-E</b>													
W-368	02-FEB-10	E601	<0.5	12	<0.5	<0.5	0.92	<1	23	2.9	<0.5	19	8.7
W-413	02-FEB-10	E601	<0.5	16	<0.5	<0.5	1.2	<1	13	<0.5	<0.5	7.7	4.1
<b>TFC-SE</b>													
W-1213	05-JAN-10	E601	<0.5	4.2	<0.5	<0.5	5	<1	11	<0.5	<0.5	22	<0.5
W-2201	05-JAN-10	E601	<0.5	9.2	<0.5	<0.5	3.3	<1	18	0.79	<0.5	21	1.4
<b>TFD</b>													
W-351	05-JAN-10	E601	8.3	1.7	<0.5	0.97	4.8	<1	1.6	5.3	<0.5	170	8.2
W-653	05-JAN-10	E601	27	9.2	<0.5	<0.5	0.98	1	2	0.83	<0.5	1100	<0.5
W-906	05-JAN-10	E601	<0.5	0.65	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	5.3	0.74
W-907-2 <sup>a</sup>	08-APR-09	E601	<0.5	7.2	<0.5	0.6	4.2	<1	1.6	7.8	<0.5	92	<0.5
W-1206	05-JAN-10	E601	0.72	1.4	<0.5	<0.5	0.78	<1	<0.5	1	<0.5	24	2.3
W-1208	05-JAN-10	E601	2.6	2	<0.5	0.59	2.6	<1	0.59	3.4	<0.5	78	41
W-2011 <sup>a</sup>	27-AUG-09	E601	<0.5	0.56	<0.5	<0.5	<0.5	12	<0.5	<0.5	<0.5	4.8	<0.5
W-2101	05-JAN-10	E601	12	3.9	<0.5	<0.5	0.52	<1	0.76	0.55	<0.5	420	<0.5
W-2102 <sup>a</sup>	28-AUG-09	E601	9.1	7.5	<0.5	<0.5	0.51	2.3	2.6	0.54	<0.5	660	<0.5
<b>TFD-E</b>													
W-1253 <sup>ab</sup>	11-FEB-08	E601	6	6.2	<5	<5	16	<10	17	12	<5	2300	<5
W-1255 <sup>a</sup>	11-FEB-08	E601	4.4	2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	260	<0.5
W-1301	06-JAN-10	E601	4	2.4	2.6	8.2	71	1	0.59	57	<0.5	400	<0.5
W-1303 <sup>a</sup>	14-OCT-08	E601	3	2.9	0.8	3.1	7.2	<1	<0.5	6.7	<0.5	150	23
W-1306	06-JAN-10	E601	4.7	2.9	<0.5	<0.5	1.1	<1	<0.5	4.1	<0.5	110	<0.5
W-1307	06-JAN-10	E601	2	<0.5	<0.5	<0.5	0.62	<1	<0.5	0.68	<0.5	26	<0.5
W-1404	06-JAN-10	E601	<0.5	20	<0.5	2.6	0.84	<1	<0.5	58	<0.5	38	<0.5
W-1550	06-JAN-10	E601	9.9	4.6	<0.5	<0.5	1.6	<1	0.9	5.2	<0.5	220	<0.5
W-2006	20-JAN-10	E601	0.85	1.6	2.4	5	100	<1	<0.5	51	<0.5	510	<0.5
W-2203 <sup>a</sup>	08-JUL-09	E601	17	2.2	<0.5	<0.5	3.2	<1	4.2	5.2	<0.5	140	<0.5
<b>TFD-HPD</b>													
W-1254	13-JAN-10	E601	2.3	0.62	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	53	<0.5
W-1551 <sup>a</sup>	24-AUG-09	E601	4	2.1	<0.5	<0.5	<0.5	<1	1.6	<0.5	<0.5	170	<0.5
W-1552 <sup>a</sup>	24-AUG-09	E601	<0.5	1.1	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	26	<0.5
W-1650 <sup>a</sup>	20-AUG-09	E601	6.1	1.6	<0.5	<0.5	<0.5	<1	2.2	<0.5	<0.5	260	<0.5
W-1651 <sup>a</sup>	24-AUG-09	E601	1.5	1	<0.5	<0.5	<0.5	<1	0.85	<0.5	<0.5	74	<0.5
W-1652 <sup>a</sup>	20-AUG-09	E601	1.2	1.1	<0.5	<0.5	<0.5	2.4	<0.5	0.63	<0.5	150	<0.5
W-1653 <sup>a</sup>	20-AUG-09	E601	0.58	0.67	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	49	<0.5
W-1654 <sup>a</sup>	24-AUG-09	E601	<0.5	0.68	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	25	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCl <sub>4</sub> <-	CHCl <sub>3</sub> -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
<b>TFD-HPD (cont.)</b>													
W-1655 <sup>a</sup>	24-AUG-09	E601	<b>0.62</b>	<b>1.1</b>	<0.5	<0.5	<0.5	<1	<0.5	<b>0.91</b>	<0.5	<b>63</b>	<0.5
W-1656 <sup>a</sup>	20-AUG-09	E601	<b>2.1</b>	<b>3</b>	<0.5	<0.5	<0.5	<1	<b>0.55</b>	<0.5	<0.5	<b>97</b>	<0.5
W-1657 <sup>a</sup>	24-AUG-09	E601	<b>8.9</b>	<b>4</b>	<0.5	<0.5	<0.5	<1	<b>4</b>	<0.5	<0.5	<b>730</b>	<0.5
<b>TFD-S</b>													
W-1503	20-JAN-10	E601	<b>2.6</b>	<b>2.6</b>	<0.5	<0.5	<b>5.7</b>	<1	<b>1.3</b>	<b>5.3</b>	<0.5	<b>120</b>	<0.5
W-1504	20-JAN-10	E601	<0.5	<0.5	<0.5	<0.5	<b>13</b>	<1	<b>3</b>	<b>19</b>	<0.5	<b>84</b>	<0.5
W-1510	20-JAN-10	E601	<0.5	<0.5	<0.5	<0.5	<b>1.5</b>	<1	<0.5	<b>2.2</b>	<0.5	<b>21</b>	<0.5
<b>TFD-SE</b>													
W-314	24-MAR-10	E601	<b>0.81</b>	<b>5.4</b>	<b>0.77</b>	<b>1</b>	<b>7</b>	<1	<b>2.7</b>	<b>12</b>	<0.5	<b>100</b>	<0.5
W-1308	06-JAN-10	E601	<0.5	<b>1.6</b>	<b>2</b>	<b>6.4</b>	<b>22</b>	<b>1.4</b>	<0.5	<b>120</b>	<0.5	<b>200</b>	<0.5
W-1403 <sup>a</sup>	09-OCT-09	E601	<b>2.6</b>	<b>19</b>	<b>1.4</b>	<b>6.7</b>	<b>44</b>	<1	<b>4.1</b>	<b>82</b>	<0.5	<b>400</b>	<0.5
W-1904 <sup>a</sup>	26-DEC-07	E601	<0.5	<0.5	<b>0.54</b>	<b>0.67</b>	<b>5.8</b>	<1	<0.5	<b>39</b>	<0.5	<b>42</b>	<0.5
W-2005	06-JAN-10	E601	<b>0.94</b>	<b>1</b>	<0.5	<b>0.59</b>	<b>17</b>	<1	<0.5	<b>34</b>	<0.5	<b>57</b>	<0.5
SIP-ETC-201 <sup>a</sup>	26-DEC-07	E601	<0.5	<b>0.55</b>	<b>0.59</b>	<b>1.1</b>	<b>8.5</b>	<1	<0.5	<b>59</b>	<0.5	<b>60</b>	<0.5
<b>TFD-SS</b>													
W-1523 <sup>a</sup>	12-OCT-09	E601	<b>5.4</b>	<b>3.7</b>	<b>0.65</b>	<b>1.8</b>	<b>14</b>	<1	<b>1.7</b>	<b>27</b>	<0.5	<b>180</b>	<0.5
W-1601	18-MAR-10	E601	<b>4.1</b>	<b>4.8</b>	<b>1.6</b>	<b>7.1</b>	<b>29</b>	<b>1.2</b>	<b>1.6</b>	<b>96</b>	<0.5	<b>280</b>	<0.5
W-1602	18-MAR-10	E601	<0.5	<b>1.4</b>	<0.5	<0.5	<0.5	<1	<0.5	<b>0.58</b>	<0.5	<b>11</b>	<b>14</b>
W-1603	18-MAR-10	E601	<b>2.5</b>	<b>2</b>	<b>0.68</b>	<b>2.8</b>	<b>9.8</b>	<1	<0.5	<b>15</b>	<0.5	<b>130</b>	<b>26</b>
<b>TFD-W</b>													
W-1215	15-MAR-10	E601	<0.5	<b>4.3</b>	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<b>4.6</b>	<b>50</b>
W-1216	15-MAR-10	E601	<0.5	<b>2.8</b>	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<b>6</b>	<b>27</b>
W-1902	11-JAN-10	E601	<b>0.54</b>	<b>3.5</b>	<0.5	<0.5	<0.5	<1	<b>0.62</b>	<0.5	<0.5	<b>5.4</b>	<b>100</b>
<b>TFE-E</b>													
W-566	13-JAN-10	E601	<b>0.55</b>	<b>3.9</b>	<0.5	<0.5	<b>4.5</b>	<1	<b>12</b>	<b>3.4</b>	<0.5	<b>42</b>	<0.5
W-1109	13-JAN-10	E601	<0.5	<b>0.75</b>	<b>0.61</b>	<0.5	<b>53</b>	<1	<b>9.4</b>	<b>89</b>	<0.5	<b>240</b>	<0.5
W-1903 <sup>a</sup>	06-JUL-09	E601	<0.5	<0.5	<b>1.3</b>	<0.5	<b>39</b>	<1	<b>7.6</b>	<b>88</b>	<0.5	<b>91</b>	<0.5
W-1909 <sup>a</sup>	27-AUG-09	E601	<0.5	<b>1.4</b>	<b>3.4</b>	<0.5	<b>180</b>	<b>3.1</b>	<b>17</b>	<b>350</b>	<0.5	<b>540</b>	<0.5
W-2305	16-FEB-10	E601	<0.5	<b>0.91</b>	<b>1.7</b>	<0.5	<b>170</b>	<b>1.6</b>	<b>28</b>	<b>280</b>	<0.5	<b>660</b>	<0.5
<b>TFE-HS</b>													
W-2012	07-JAN-10	E601	<0.5	<b>0.85</b>	<0.5	<0.5	<b>6.5</b>	<b>1</b>	<b>20</b>	<b>36</b>	<0.5	<b>330</b>	<0.5
W-2105 <sup>a</sup>	16-JUN-09	E601	<0.5	<b>0.74</b>	<0.5	<0.5	<b>0.79</b>	<1	<b>1.6</b>	<b>8.6</b>	<0.5	<b>210</b>	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCl <sub>4</sub> <-	CHCl <sub>3</sub> -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
<b>TFE-NW</b>													
W-1211	11-JAN-10	E601	<b>0.52</b>	<b>2.6</b>	<0.5	<0.5	<0.5	<1	<b>1.2</b>	<0.5	<0.5	<b>10</b>	<0.5
W-1409 <sup>a</sup>	10-APR-08	E601	<0.5	<0.5	<0.5	<0.5	<b>1.2</b>	<1	<b>0.57</b>	<b>1.7</b>	<0.5	<b>30</b>	<0.5
<b>TFE-SE</b>													
W-359	11-JAN-10	E601	<b>3.3</b>	<b>0.77</b>	<0.5	<0.5	<b>19</b>	<1	<b>7.6</b>	<b>8</b>	<0.5	<b>140</b>	<b>0.83</b>
<b>TFE-SW</b>													
W-1518	13-JAN-10	E601	<0.5	<b>0.75</b>	<0.5	<0.5	<b>1.8</b>	<b>3.1</b>	<b>0.96</b>	<b>0.71</b>	<0.5	<b>15</b>	<0.5
W-1520 <sup>a</sup>	01-JUL-09	E601	<b>6.5</b>	<b>4.5</b>	<0.5	<b>1.2</b>	<b>1.2</b>	<b>2.9</b>	<0.5	<b>3.8</b>	<0.5	<b>60</b>	<0.5
W-1522 <sup>a</sup>	05-OCT-09	E601	<b>6.3</b>	<b>4.7</b>	<b>0.86</b>	<b>0.82</b>	<b>7.2</b>	<b>12</b>	<b>1.1</b>	<b>4.4</b>	<0.5	<b>150</b>	<0.5
<b>TFE-W</b>													
W-292	14-JAN-10	E601	<0.5	<b>0.8</b>	<0.5	<0.5	<b>1.1</b>	<b>3.2</b>	<b>1.5</b>	<b>1.2</b>	<0.5	<b>21</b>	<0.5
W-305	14-JAN-10	E601	<0.5	<b>1.3</b>	<0.5	<0.5	<b>3.7</b>	<1	<b>20</b>	<b>9.2</b>	<0.5	<b>40</b>	<b>0.74</b>
<b>TFG-1</b>													
W-1111	14-JAN-10	E601	<b>3.5</b>	<b>11</b>	<0.5	<0.5	<b>1.4</b>	<1	<b>0.64</b>	<b>1.4</b>	<0.5	<b>4.4</b>	<0.5
<b>TFG-N</b>													
W-1806	13-JAN-10	E601	<0.5	<b>6.3</b>	<0.5	<0.5	<0.5	<1	<0.5	<b>12</b>	<0.5	<b>2.7</b>	<0.5
W-1807	13-JAN-10	E601	<0.5	<b>4.5</b>	<0.5	<0.5	<b>1.2</b>	<1	<b>1.8</b>	<b>17</b>	<0.5	<b>5.8</b>	<0.5
<b>TF406</b>													
W-1309	12-JAN-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<b>2</b>	<0.5
W-1310	12-JAN-10	E601	<0.5	<b>0.78</b>	<0.5	<0.5	<0.5	<1	<b>0.5</b>	<0.5	<0.5	<b>6.5</b>	<0.5
GSW-445 <sup>a</sup>	26-MAR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<b>3</b>	<0.5
<b>TF406-NW</b>													
W-1801	12-JAN-10	E601	<0.5	<b>1.9</b>	<0.5	<0.5	<0.5	<1	<b>6.2</b>	<b>0.71</b>	<0.5	<b>28</b>	<0.5
<b>TF518-N<sup>c</sup></b>													
W-1410 <sup>a</sup>	23-JAN-08	E601	<b>2.8</b>	<b>1.5</b>	<0.5	<0.5	<0.5	<1	<0.5	<b>0.83</b>	<0.5	<b>18</b>	<0.5
<b>TF518-PZ</b>													
W-1615	15-JAN-10	E601	<0.5	<b>0.78</b>	<0.5	<0.5	<b>3.1</b>	<1	<0.5	<b>33</b>	<0.5	<b>93</b>	<0.5
W-518-1913	16-FEB-10	E601	<0.5	<0.5	<0.5	<0.5	<b>1.5</b>	<1	<0.5	<b>15</b>	<0.5	<b>69</b>	<0.5
W-518-1914	16-FEB-10	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<b>95</b>	<0.5	<b>52</b>	<0.5
W-518-1915 <sup>b</sup>	15-JAN-10	E601	<5	<5	<5	<5	<b>9.1</b>	<10	<5	<b>250</b>	<5	<b>2100</b>	<5
SVB-518-201 <sup>a</sup>	07-FEB-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<b>35</b>	<0.5	<b>8.5</b>	<0.5

**Table A-2. VOC analyses of samples from treatment facility extraction wells.**

Extraction Well	Date Sampled	Analytic Method	CCl <sub>4</sub> <-	CHCl <sub>3</sub> -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
<b>TF518-PZ (cont.)</b>													
SVB-518-204 <sup>a</sup>	07-FEB-08	E601	<0.5	<b>0.63</b>	<0.5	<0.5	<b>1.4</b>	<1	<0.5	<b>43</b>	<0.5	<b>550</b>	<0.5
<b>TF5475-1<sup>c</sup></b>													
W-1302-2 <sup>a</sup>	18-JUL-07	E601	<b>1.8</b>	<b>19</b>	<b>0.73</b>	<b>3.4</b>	<b>20</b>	<1	<b>7.4</b>	<b>41</b>	<0.5	<b>260</b>	<0.5
<b>TF5475-2</b>													
W-1108	06-JAN-10	E601	<b>2.1</b>	<b>23</b>	<b>0.72</b>	<b>2.8</b>	<b>21</b>	<1	<b>7.8</b>	<b>39</b>	<0.5	<b>280</b>	<0.5
W-1415	21-JAN-10	E601	<b>1.7</b>	<b>19</b>	<b>0.62</b>	<b>2.1</b>	<b>19</b>	<1	<b>8.4</b>	<b>32</b>	<0.5	<b>260</b>	<0.5
<b>TF5475-3<sup>c</sup></b>													
W-1604 <sup>a</sup>	21-AUG-07	E601	<b>2.9</b>	<b>29</b>	<b>0.94</b>	<b>5.2</b>	<b>23</b>	<1	<b>17</b>	<b>45</b>	<0.5	<b>390</b>	<0.5
W-1605 <sup>a</sup>	21-AUG-07	E601	<b>1.3</b>	<b>13</b>	<0.5	<b>5.7</b>	<b>7.2</b>	<b>1.2</b>	<b>4</b>	<b>21</b>	<0.5	<b>210</b>	<0.5
W-1608 <sup>a</sup>	21-AUG-07	E601	<0.5	<b>9.5</b>	<b>0.71</b>	<b>3.2</b>	<b>2.1</b>	<b>3.2</b>	<b>1.8</b>	<b>7.1</b>	<0.5	<b>69</b>	<0.5
W-1609 <sup>a</sup>	21-AUG-07	E601	<0.5	<b>13</b>	<b>0.55</b>	<b>9.4</b>	<b>2.7</b>	<1	<b>0.94</b>	<b>7.9</b>	<0.5	<b>62</b>	<0.5

Notes on following page.

**Table A-2. VOC analyses of samples from treatment facility extraction wells.**

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<sup>a</sup> Most recent VOC sample results available.

<sup>b</sup> Elevated detection limit due to dilution.

<sup>c</sup> Treatment Facility did not operate during reporting period. Please refer to Table A-1 for details.

Notes:

CCl<sub>4</sub> = Carbon tetrachloride

CHCl<sub>3</sub> = Chloroform

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCl <sub>4</sub> <-	CHCl <sub>3</sub> -	1,1-DCA -	1,2-DCA -	1,1-DCE PPM(V/V)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
<b>VTFD-ETCS</b>													
W-1904 <sup>a</sup>	09-JUN-09	TO15DIT	<0.005	<b>0.041</b>	<b>0.0056</b>	<0.005	<b>0.25</b>	<0.005	<0.005	<b>2.1</b>	<0.005	<b>0.67</b>	<0.005
W-ETC-2003	16-FEB-10	TO15DIT	<0.005	<0.005	<0.005	<0.005	<b>0.02</b>	<0.005	<0.005	<b>0.32</b>	<0.005	<b>0.082</b>	<0.005
W-ETC-2004A	16-FEB-10	TO15DIT	<0.005	<b>0.011</b>	<0.005	<0.005	<0.005	<0.005	<0.005	<b>0.44</b>	<0.005	<b>0.098</b>	<0.005
W-ETC-2004B	16-FEB-10	TO15DIT	<0.005	<b>0.041</b>	<b>0.0081</b>	<0.005	<b>0.1</b>	<0.005	<0.005	<b>2</b>	<b>0.0074</b>	<b>2.3</b>	<0.005
SIP-ETC-201 <sup>a</sup>	09-JUN-09	TO15DIT	<0.005	<b>0.009</b>	<b>0.037</b>	<b>0.0059</b>	<b>0.65</b>	<0.005	<0.005	<b>2.9</b>	<0.005	<b>1.4</b>	<0.005
<b>VTFD-HPD</b>													
W-1552 <sup>a</sup>	13-FEB-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<b>0.011</b>	<0.005	<b>0.2</b>	<0.005
W-1650 <sup>a</sup>	03-JUL-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
W-1651 <sup>a</sup>	03-JUL-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
W-1652 <sup>a</sup>	03-JUL-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
W-1653 <sup>a</sup>	03-JUL-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
W-1654 <sup>a</sup>	03-JUL-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
W-1655 <sup>a</sup>	03-JUL-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
W-1656 <sup>a</sup>	03-JUL-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
W-1657 <sup>a</sup>	03-JUL-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
W-HPA-002A	19-JAN-10	TO15DIT	<b>0.019</b>	<b>0.014</b>	<0.005	<0.005	<b>0.0069</b>	<0.005	<0.005	<b>0.047</b>	<0.005	<b>0.58</b>	<0.005
W-HPA-002B <sup>a</sup>	23-JUL-09	TO15DIT	<0.011	<b>0.011</b>	<0.011	<0.011	<0.011	<0.011	<0.011	<b>0.056</b>	<0.011	<b>0.46</b>	<0.011
<b>VTFD-HS</b>													
W-653 <sup>a</sup>	03-NOV-09	TO15DIT	<b>0.026</b>	<0.005	<0.005	<0.005	<0.005	<0.005	<b>0.016</b>	<0.005	<0.005	<b>0.58</b>	<0.005
W-2011 <sup>a</sup>	15-FEB-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<b>0.081</b>	<0.005
W-2101 <sup>a</sup>	03-NOV-09	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<b>0.052</b>	<0.005
W-2102 <sup>a</sup>	15-FEB-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<b>0.11</b>	<0.005
<b>VTFE-ELM</b>													
W-1903 <sup>a</sup>	08-JUL-09	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
W-1909 <sup>a</sup>	10-JUL-09	TO15DIT	<0.005	<0.005	<b>0.0058</b>	<0.005	<b>0.95</b>	<0.005	<b>0.44</b>	<b>0.75</b>	<0.005	<b>1.5</b>	<0.005
W-2305 <sup>a</sup>	10-JUL-09	TO15DIT	<0.01	<0.01	<0.01	<0.01	<b>6</b>	<b>0.012</b>	<b>2.3</b>	<b>3.3</b>	<0.01	<b>7.5</b>	<b>0.014</b>
W-543-001 <sup>a</sup>	01-JUL-09	TO15DIT	<0.005	<0.005	<0.005	<0.005	<b>0.11</b>	<0.005	<b>0.017</b>	<b>0.34</b>	<0.005	<b>0.32</b>	<0.005
W-543-003	07-JAN-10	TO15DIT	<0.005	<b>0.013</b>	<0.005	<0.005	<b>0.14</b>	<0.005	<b>0.037</b>	<b>0.54</b>	<0.005	<b>0.88</b>	<0.005
W-543-1908 <sup>a</sup>	01-JUL-09	TO15DIT	<0.005	<0.005	<0.005	<0.005	<b>0.072</b>	<0.005	<b>0.019</b>	<b>0.13</b>	<0.005	<b>0.33</b>	<0.005
<b>VTFE-HS</b>													
W-ETS-2008A	16-FEB-10	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<b>0.029</b>	<0.005	<b>0.079</b>	<0.005
W-ETS-2008B	16-FEB-10	TO15DIT	<0.01	<0.01	<0.01	<0.01	<b>0.039</b>	<0.01	<b>0.091</b>	<b>1.1</b>	<0.01	<b>2.9</b>	<0.01
W-ETS-2009 <sup>a</sup>	13-AUG-09	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<b>0.022</b>	<0.005	<b>0.18</b>	<0.005
W-ETS-2010A	16-FEB-10	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<b>0.056</b>	<0.005	<b>0.15</b>	<0.005
W-ETS-2010B <sup>a</sup>	05-AUG-09	TO15DIT	<0.005	<0.005	<b>0.016</b>	<0.005	<b>0.011</b>	<b>0.03</b>	<b>0.046</b>	<b>0.095</b>	<b>0.051</b>	<b>1</b>	<0.005

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCl <sub>4</sub> <-	CHCl <sub>3</sub> -	1,1-DCA -	1,2-DCA -	1,1-DCE PPM(V/V)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
<b>VTFE-HS (cont.)</b>													
W-2105 <sup>a</sup>	30-JAN-08	TO15DI	<0.005	<0.005	<0.005	<0.005	<b>0.014</b>	<0.005	<b>0.01</b>	<b>0.022</b>	<0.005	<b>0.13</b>	<0.005
<b>VTF406-HS</b>													
W-217	16-FEB-10	TO15DIT	<b>0.061</b>	<b>0.0072</b>	<0.005	<0.005	<b>0.31</b>	<0.005	<b>0.07</b>	<b>0.52</b>	<0.005	<b>0.67</b>	<0.005
W-514-2007A	16-FEB-10	TO15DIT	<b>0.013</b>	<0.005	<0.005	<0.005	<b>0.0086</b>	<0.005	<b>0.0089</b>	<b>0.041</b>	<0.005	<b>0.33</b>	<b>0.16</b>
W-514-2007B	16-FEB-10	TO15DIT	<b>0.12</b>	<b>0.016</b>	<0.012	<0.012	<b>0.95</b>	<0.012	<b>0.11</b>	<b>0.82</b>	<0.012	<b>3.9</b>	<b>0.038</b>
<b>VTF511</b>													
W-274 <sup>a</sup>	04-OCT-06	TO15DI	<b>0.14</b>	<b>0.02</b>	<0.0062	<0.0062	<b>0.07</b>	<0.0062	<b>0.014</b>	<b>0.33</b>	<0.0062	<b>6.1</b>	<b>0.38</b>
W-1517 <sup>a</sup>	20-DEC-07	TO15DI	<b>0.0066</b>	<0.005	<0.005	<0.005	<b>0.0068</b>	<0.005	<0.005	<b>0.022</b>	<0.005	<b>0.65</b>	<b>0.016</b>
W-2204 <sup>a</sup>	21-MAY-09	TO15DIT	<b>0.098</b>	<b>0.034</b>	<0.005	<b>0.038</b>	<b>0.019</b>	<0.005	<b>0.0082</b>	<b>0.42</b>	<0.005	<b>3.9</b>	<0.005
W-2206 <sup>a</sup>	21-MAY-09	TO15DIT	<b>0.013</b>	<b>0.022</b>	<0.005	<b>0.024</b>	<0.005	<0.005	<0.005	<b>0.24</b>	<0.005	<b>2</b>	<0.005
W-2207A <sup>a</sup>	14-MAY-09	TO15DIT	<0.005	<b>0.0055</b>	<0.005	<0.005	<b>0.0053</b>	<0.005	<0.005	<b>0.01</b>	<0.005	<b>1.5</b>	<0.005
W-2207B	28-JAN-10	TO15DIT	<0.031	<b>0.036</b>	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<b>13</b>	<0.031
W-2208A <sup>a</sup>	14-MAY-09	TO15DIT	<b>0.025</b>	<b>0.016</b>	<0.01	<0.01	<b>0.05</b>	<0.01	<0.01	<b>0.019</b>	<0.01	<b>9.8</b>	<b>0.026</b>
W-2208B	28-JAN-10	TO15DIT	<b>0.094</b>	<0.062	<0.062	<0.062	<b>0.42</b>	<0.062	<0.062	<b>0.092</b>	<0.062	<b>29</b>	<b>0.099</b>
W-2205 <sup>a</sup>	21-MAY-09	TO15DIT	<b>0.18</b>	<b>0.033</b>	<0.005	<b>0.0052</b>	<b>0.045</b>	<0.005	<b>0.0078</b>	<b>0.23</b>	<0.005	<b>3.6</b>	<b>0.012</b>
<b>VTF518-PZ</b>													
W-1615	07-JAN-10	TO15DIT	<b>0.05</b>	<0.025	<0.025	<0.025	<b>0.7</b>	<0.025	<b>0.4</b>	<b>6.5</b>	<0.025	<b>11</b>	<0.025
W-518-1913 <sup>a</sup>	17-AUG-09	TO15DIT	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<b>0.19</b>	<0.17
W-518-1914 <sup>a</sup>	17-AUG-09	TO15DIT	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<b>1.1</b>	<0.12	<b>0.61</b>	<0.12
W-518-1915	07-JAN-10	TO15DIT	<0.5	<0.5	<0.5	<0.5	<b>0.69</b>	<0.5	<0.5	<b>46</b>	<0.5	<b>170</b>	<0.5
SVB-518-201 <sup>a</sup>	14-AUG-09	TO15DIT	<0.076	<0.076	<0.076	<0.076	<0.076	<0.076	<0.076	<0.076	<0.076	<b>0.26</b>	<0.076
SVB-518-204 <sup>a</sup>	15-JAN-08	TO15DI	<0.02	<0.02	<0.02	<0.02	<b>0.051</b>	<0.02	<0.02	<b>2.4</b>	<0.02	<b>15</b>	<0.02
<b>VTF5475<sup>b</sup></b>													
W-ETS-507 <sup>a</sup>	23-SEP-09	TO15DI	<0.005	<b>2.7</b>	<0.005	<b>0.023</b>	<0.005	<0.005	<0.005	<b>0.54</b>	<0.005	<b>2.1</b>	<0.005
W-1605 <sup>a</sup>	06-SEP-07	TO15DI	<b>0.0069</b>	<b>0.17</b>	<0.005	<b>0.15</b>	<b>0.11</b>	<0.005	<b>0.036</b>	<b>0.1</b>	<0.005	<b>0.85</b>	<0.005
W-1608 <sup>a</sup>	06-SEP-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<b>0.0061</b>	<0.005
W-2211 <sup>a</sup>	23-SEP-09	TO15DI	<0.005	<b>0.036</b>	<0.005	<b>0.0066</b>	<b>0.014</b>	<0.005	<0.005	<b>0.024</b>	<0.005	<b>0.2</b>	<0.005
W-2212 <sup>a</sup>	23-SEP-09	TO15DI	<0.005	<b>0.021</b>	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
W-2302 <sup>a</sup>	23-SEP-09	TO15DI	<0.005	<b>0.0072</b>	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
W-2303 <sup>a</sup>	23-SEP-09	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SVI-ETS-504 <sup>a</sup>	12-OCT-07	TO15DI	<0.005	<b>0.32</b>	<b>0.0052</b>	<b>0.14</b>	<b>0.073</b>	<0.005	<0.005	<b>0.064</b>	<0.005	<b>0.34</b>	<0.005

Notes on following page.

**Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.**

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<sup>a</sup> Most recent VOC vapor sample results available.

<sup>b</sup> VTF5475 did not operate during reporting period due to mixed waste disposition issues.

Notes:

$\text{CCl}_4$  = Carbon tetrachloride

$\text{CHCl}_3$  = Chloroform

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.



**Table A-4. Chromium analyses of influent, effluent and receiving water samples by treatment facility.**

<b>Treatment Facility</b>	<b>Sample Station</b>	<b>Date Sampled</b>	<b>Chromium (total)<sup>a</sup> mg/L (ppm)</b>	<b>Hexavalent Chromium mg/L (ppm)</b>
<b>TFA</b>	TFA-I001	04-JAN-10	0.011	0.011
	TFA-E001	04-JAN-10	0.011	0.0096
<b>TFA-E</b>	W-254	06-JAN-10	0.0084	NA
	STU06-E	06-JAN-10	0.0079	0.0074
<b>TFA-W</b>	TFA-W-E	21-JAN-10	0.016	NA
<b>TFB</b>	TFB-I002	04-JAN-10	0.019	NA
	TFB-E002	04-JAN-10	0.022	0.015
	TFB-E002	02-FEB-10	0.015	NA
	TFB-E002	01-MAR-10	0.013	NA
	TFB-R002	04-JAN-10	0.014	NA
<b>TFC</b>	TFC-I003	10-FEB-10	0.017	NA
	TFC-E003	29-JAN-10	<0.001	NA
	TFC-E003	10-FEB-10	0.0098	0.0093
	TFC-E003	01-MAR-10	0.012	NA
	TFC-R003	10-FEB-10	0.0036	NA
<b>TFC-E</b>	MTU1-I	02-FEB-10	0.04	NA
	MTU1-E	02-FEB-10	<0.005	<0.005
	MTU1-E	03-MAR-10	<0.001	NA
<b>TFC-SE</b>	PTU1-I	05-JAN-10	0.029	NA
	PTU1-E	05-JAN-10	0.017	0.016
	PTU1-E	02-FEB-10	0.015	NA
	PTU1-E	02-MAR-10	0.018	NA
<b>TFD</b>	TFD-I004	05-JAN-10	0.01	NA
	TFD-E004	05-JAN-10	0.0096	0.0095
<b>TFD-E</b>	PTU8-I	06-JAN-10	0.0084	NA
	PTU8-E	06-JAN-10	0.0086	0.0085
<b>TFD-HPD</b>	PTU10-I	13-JAN-10	0.01	NA
	PTU10-E	13-JAN-10	0.0089	0.0097
<b>TFD-S</b>	PTU2-I	20-JAN-10	0.01	NA
	PTU2-E	20-JAN-10	0.011	0.011
<b>TFD-SE</b>	PTU11-I	06-JAN-10	0.011	NA
	PTU11-E	06-JAN-10	0.011	0.012
<b>TFD-SS</b>	PTU12-I	19-JAN-10	0.0077	NA
	PTU12-E	19-JAN-10	0.0078	0.0078
<b>TFD-W</b>	PTU6-I	11-JAN-10	0.01	NA
	PTU6-E	11-JAN-10	0.0094	0.0097
<b>TFE-E</b>	PTU3-I	13-JAN-10	0.009	NA
	PTU3-E	13-JAN-10	0.0073	0.0086
<b>TFE-HS</b>	GTU07-I	07-JAN-10	0.0069	NA
	GTU07-E	07-JAN-10	<0.005	<0.005
<b>TFE-NW</b>	PTU9-I	11-JAN-10	0.0099	NA

**Table A-4. Chromium analyses of influent, effluent and receiving water samples by treatment facility.**

<b>Treatment Facility</b>	<b>Sample Station</b>	<b>Date Sampled</b>	<b>Chromium (total)<sup>a</sup> mg/L (ppm)</b>	<b>Hexavalent Chromium mg/L (ppm)</b>
<b>TFE-NW (cont.)</b>				
	PTU9-E	11-JAN-10	0.0091	0.0097
<b>TFE-SE</b>	MTU04-I	11-JAN-10	0.0075	NA
	MTU04-E	11-JAN-10	0.0062	0.0073
<b>TFE-SW</b>	MTU03-I	13-JAN-10	0.0047	NA
	MTU03-E	13-JAN-10	<0.005	<0.005
<b>TFE-W</b>	MTU05-I	14-JAN-10	0.01	NA
	MTU05-E	14-JAN-10	0.0087	0.0096
<b>TFG-1</b>	GTU01-I	14-JAN-10	0.0076	NA
	GTU01-E	14-JAN-10	<0.005	<0.005
	TFG-ASW	14-JAN-10	0.012	NA
<b>TFG-N</b>	MTU02-I	13-JAN-10	0.008	NA
	MTU02-E	13-JAN-10	0.0066	0.0077
<b>TF406</b>	PTU5-I	12-JAN-10	0.012	NA
	PTU5-E	12-JAN-10	0.011	0.012
<b>TF406-NW</b>	W-1801	12-JAN-10	0.0016	NA
	GTU03-E	12-JAN-10	<0.005	<0.005
<b>TF5475-2</b>	GTU09-I	06-JAN-10	0.013	NA
	GTU09-E	06-JAN-10	0.013	0.014

<sup>a</sup>A discharge limit of 0.050 ppm is set for total chromium during the dry season (April 1-November 30), and no limit is set for total chromium for the wet season (December 1-March 31); however, a limit of 0.022 ppm hexavalent chromium applies during the wet season. Discharge limits are defined in the Explanation of Significant Differences for metals discharge limits (April 1997).

Shaded values exceeded the discharge limit. See text for explanation.

**Table A-5. Bioassay, turbidity, and chloride analyses of influent and effluent samples by treatment facility.**

<b>Treatment Facility</b>	<b>Sample Station</b>	<b>Date Sampled</b>	<b>Aquatic Bioassay<sup>a</sup> Percent Survival</b>	<b>Turbidity Nephelometric Turbidity Units (NTU)</b>	<b>Chloride (mg/L)</b>
<b>TFA</b>	TFA-I001	04-JAN-10	NA	NA	78
<b>TFA</b>	TFA-E001	04-JAN-10	100 (100)	<0.1	78
<b>TFA-E</b>	STU06-E	06-JAN-10	100 (100)	<0.1	47
<b>TFB</b>	TFB-E002	04-JAN-10	100 (100)	<0.1	68
<b>TFC</b>	TFC-E003	10-FEB-10	100 (100)	0.25	230
<b>TFC-E</b>	MTU1-E	02-FEB-10	100 (100)	<0.1	180
<b>TFC-SE</b>	PTU1-E	05-JAN-10	100 (100)	0.1	88
<b>TFD</b>	TFD-E004	05-JAN-10	100 (100)	0.1	290
	TFD-E004	19-JAN-10	NA	NA	240
<b>TFD-E</b>	PTU8-E	06-JAN-10	100 (100)	0.14	280
<b>TFD-HPD</b>	PTU10-E	13-JAN-10	100 (100)	<0.1	390
<b>TFD-S</b>	PTU2-E	20-JAN-10	100 (100)	0.29	67
<b>TFD-SE</b>	PTU11-E	06-JAN-10	100 (100)	0.15	96
<b>TFD-SS</b>	PTU12-E	19-JAN-10	100 (100)	<0.1	74
<b>TFD-W</b>	PTU6-E	11-JAN-10	100 (100)	<0.1	240
<b>TFE-E</b>	PTU3-E	13-JAN-10	100 (100)	0.16	110
<b>TFE-HS</b>	GTU07-E	07-JAN-10	100 (100)	0.11	39
<b>TFE-NW</b>	PTU9-E	11-JAN-10	100 (100)	<0.1	100
<b>TFE-SE</b>	MTU04-E	11-JAN-10	100 (100)	0.42	94
<b>TFE-SW</b>	MTU03-E	13-JAN-10	100 (100)	0.13	73
<b>TFE-W</b>	MTU05-E	14-JAN-10	100 (100)	0.13	58
<b>TFG-1</b>	GTU01-E	14-JAN-10	100 (100)	0.1	33
<b>TFG-N</b>	MTU02-E	13-JAN-10	100 (100)	<0.1	18
<b>TF406</b>	PTU5-E	12-JAN-10	100 (100)	<0.1	49
<b>TF406-NW</b>	GTU03-E	12-JAN-10	100 (100)	0.13	49
<b>TF5475-2</b>	GTU09-E	06-JAN-10	100 (100)	<0.1	110

<sup>a</sup>Test species was Fathead minnow and the test duration was 96 hours.

Percent survival in the control group samples shown in parentheses.

Note: NA = not applicable

Table A-6. Metals analyses of influent and effluent samples by treatment facility as compared to the instantaneous Maximum.

		Antimony	Arsenic	Beryllium	Boron	Cadmium	Copper	Cyanide	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
		<-	-	-	-	-	-	mg/L (ppm)	-	-	-	-	-	-	-	-	->
<b>Wet Season<sup>a</sup></b>		<b>NA</b>	<b>0.01</b>	<b>NA</b>	<b>NA</b>	<b>0.002</b>	<b>0.0236</b>	<b>NA</b>	<b>NA</b>	<b>0.006</b>	<b>NA</b>	<b>0.002</b>	<b>0.3</b>	<b>0.01</b>	<b>0.1</b>	<b>NA</b>	<b>0.220</b>
<b>(December 1 - March 31)</b>																	
Sample Station	Date Sampled																
<b>TFA</b>																	
TFA-I001	04-JAN-10	<0.005	<0.005	<0.0002	<b>0.67</b>	<0.001	<0.005	NA	<0.1	<0.005	<0.03	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFA-E001	04-JAN-10	<0.005	<0.005	<0.0002	<b>0.65</b>	<0.001	<0.005	NA	<0.1	<0.005	<0.03	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
<b>TFA-E</b>																	
STU06-E	06-JAN-10	<0.005	<0.005	<0.001	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
<b>TFA-W</b>																	
TFA-W-E	21-JAN-10	NA	<0.002	NA	NA	<0.005	<0.01	NA	NA	<0.002	NA	<0.0002	<0.005	NA	<0.01	NA	<0.05
<b>TFB</b>																	
TFB-E002	04-JAN-10	<0.005	<0.005	<0.001	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
<b>TFC</b>																	
TFC-E003	10-FEB-10	<0.005	<0.005	<0.001	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
<b>TFC-E</b>																	
MTU1-E	02-FEB-10	<0.005	<0.005	<0.001	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
<b>TFC-SE</b>																	
PTU1-E	05-JAN-10	<0.005	<0.005	<0.001	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
<b>TFD</b>																	
TFD-E004	05-JAN-10	<0.005	<0.005	<0.001	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFD-E004	19-JAN-10	NA	NA	NA	NA	NA	<0.05	NA	<0.1	NA	<0.03	NA	<0.1	NA	NA	NA	<0.05
<b>TFD-E</b>																	
PTU8-E	06-JAN-10	<0.005	<0.005	<0.001	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
<b>TFD-HPD</b>																	
PTU10-E	13-JAN-10	<0.005	<0.005	<0.001	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
<b>TFD-S</b>																	
PTU2-E	20-JAN-10	<0.005	<0.005	<0.001	<b>0.57</b>	<0.001	<0.005	NA	<0.05	<0.005	<0.01	<0.0002	<0.005	<0.005	<0.005	<0.001	<b>0.021</b>
<b>TFD-SE</b>																	
PTU11-E	06-JAN-10	<0.005	<0.005	<0.001	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
<b>TFD-SS</b>																	
PTU12-E	19-JAN-10	<0.005	<0.005	<0.001	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
<b>TFD-W</b>																	
PTU6-E	11-JAN-10	<0.005	<0.005	<0.001	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
<b>TFE-E</b>																	
PTU3-E	13-JAN-10	<0.005	<0.005	<0.001	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01

Table A-6. Metals analyses of influent and effluent samples by treatment facility as compared to the instantaneous Maximum.

		Antimony	Arsenic	Beryllium	Boron	Cadmium	Copper	Cyanide	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
		<-	-	-	-	-	-	mg/L (ppm)	-	-	-	-	-	-	-	-	->
Wet Season <sup>a</sup> (December 1 - March 31)		NA	0.01	NA	NA	0.002	0.0236	NA	NA	0.006	NA	0.002	0.3	0.01	0.1	NA	0.220
Sample Station	Date Sampled																
<b>TFE-HS</b> GTU07-E	07-JAN-10	<0.005	<0.005	<0.001	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
<b>TFE-NW</b> PTU9-E	11-JAN-10	<0.005	<0.005	<0.001	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
<b>TFE-SE</b> MTU04-E	11-JAN-10	<0.005	<0.005	<0.001	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<b>0.018</b>
<b>TFE-SW</b> MTU03-E	13-JAN-10	<0.005	<0.005	<0.001	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
<b>TFE-W</b> MTU05-E	14-JAN-10	<0.005	<0.005	<0.001	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
<b>TFG-1</b> GTU01-E	14-JAN-10	<0.005	<0.005	<0.001	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
<b>TFG-N</b> MTU02-E	13-JAN-10	<0.005	<0.005	<0.001	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
<b>TF406</b> PTU5-E	12-JAN-10	<0.005	<0.005	<0.001	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
<b>TF406-NW</b> GTU03-E	12-JAN-10	<0.005	<0.005	<0.001	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
<b>TF5475-2</b> GTU09-E	06-JAN-10	<0.005	<0.005	<0.001	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01

<sup>a</sup>The Explanation of Significant Differences for metals discharge identifies the Instantaneous Maximum concentrations for the wet season (December 1 - March 30).

NA = not applicable

Numbers in **BOLD** print indicate positive values above the detection limit.

Shaded values exceeded the discharge limit. See text for explanation.

Table A-7. Radiological analyses of effluent and receiving waters by treatment facility.

Treatment Facility	Sample Station	Date Sampled	Gross Alpha <-	Gross Beta pCi/L	Tritium ->
TFA	TFA-E001	04-JAN-10	<b>2.81</b>	<3	<100
TFA-E	STU06-E	06-JAN-10	<b>3.08</b>	<3	<100
TFB	TFB-E002	04-JAN-10	<b>2.42</b>	<3	<b>182</b>
TFB	TFB-R002	04-JAN-10	<b>4.1</b>	<3	<b>113</b>
TFC	TFC-E003	10-FEB-10	<b>2.32</b>	<3	<100
TFC	TFC-R003	10-FEB-10	<b>2.24</b>	<3	<100
TFC-E	MTU1-E	02-FEB-10	<2	<3	<b>340</b>
TFC-SE	PTU1-E	05-JAN-10	<b>3.28</b>	<3	<b>305</b>
TFD	TFD-E004	05-JAN-10	<b>4.35</b>	<3	<b>105</b>
TFD-E	PTU8-E	06-JAN-10	<b>7.72</b>	<b>3.08</b>	<b>160</b>
TFD-HPD	PTU10-E	13-JAN-10	<b>4.92</b>	<b>8.47</b>	<100
TFD-S	PTU2-E	20-JAN-10	<b>2.84</b>	<3	<b>236</b>
TFD-SE	PTU11-E	06-JAN-10	<b>5.7</b>	<3	<b>310</b>
TFD-SS	PTU12-E	19-JAN-10	<b>2.34</b>	<3	<b>264</b>
TFD-W	PTU6-E	11-JAN-10	<b>3.44</b>	<3	<100
TFE-E	PTU3-E	13-JAN-10	<2	<3	<100
TFE-HS	GTU07-E	07-JAN-10	<b>3.83</b>	<3	<b>136</b>
TFE-NW	PTU9-E	11-JAN-10	<b>2.76</b>	<3	<b>114</b>
TFE-SE	MTU04-E	11-JAN-10	<b>2.54</b>	<3	<100
TFE-SW	MTU03-I	21-JAN-10	NA	NA	<b>397</b>
TFE-SW	MTU03-E	13-JAN-10	<b>2.05</b>	<3	<b>343</b>
TFE-W	MTU05-E	14-JAN-10	<b>2.33</b>	<3	<b>174</b>
TFG-1	GTU01-E	14-JAN-10	<b>3.36</b>	<3	<b>190</b>
TFG-1	TFG-ASW	14-JAN-10	<b>4.27</b>	<3	<100
TFG-N	MTU02-E	13-JAN-10	<b>2.63</b>	<3	<b>170</b>
TF406	PTU5-E	12-JAN-10	<b>2.25</b>	<3	<100
TF406-NW	W-1801	12-JAN-10	NA	NA	<b>153</b>
TF406-NW	GTU03-E	12-JAN-10	<b>3.85</b>	<b>3.25</b>	<b>175</b>
TF5475-2	GTU09-E	06-JAN-10	<b>2.34</b>	<3	<b>619</b>

Numbers in **BOLD** print indicate positive values above the detection limit.

## Explanation of Abbreviations

TFA-I001 is a sampling port located immediately prior to the TFA Treatment System.

TFA-E001 is a sampling port located immediately after the TFA Treatment System, at the beginning of the discharge pipeline.

TFA receiving water is routinely sampled at the TFG-ASW location.

TFA-W-I is an influent sampling port prior to the sediment bag filter immediately following W-404.

TFA-W-E is an effluent sampling port immediately following the sediment bag filter; the water is then discharged to the Livermore Water Reclamation Plant (LWRP).

TFB-I002 is a sampling port located immediately prior to the TFB Treatment System.

TFB-E002 is a sampling port located immediately after the TFB Treatment System, at the beginning of the discharge pipeline.

TFB-R002 is a sampling station in the drainage ditch north of TFB, located approximately 75 ft downstream from the discharge point.

TFC-I003 is a sampling port located immediately prior to the TFC Treatment System.

TFC-E003 is a sampling port located immediately after the TFC Treatment System, at the beginning of the discharge pipeline.

TFC-R003 is a sampling station in Arroyo Las Positas, located approximately 75 ft downstream from the TFC discharge point.

TFD-I004 is a sampling port located immediately prior to the TFD Treatment System.

TFD-E004 is a sampling port located immediately after the TFD Treatment System, prior to discharge to the Drainage Retention Basin or to the underground discharge pipeline leading to Arroyo Las Positas.

TFD-R004 is now combined with and collected at the TFC-R003 location. Results are reported under TFC-R003, as approved by the RWQCB.

CRD1-I is a sampling port located immediately prior to the catalytic column in the Catalytic Reductive Dehalogenation treatment unit 1 (CRD1).

CRD1-E is the effluent from the catalytic column in the Catalytic Reductive Dehalogenation treatment unit 1 (CRD1) and then reinjected at W-1302.

CRD2-I is a sampling port located immediately prior to the catalytic columns in the Catalytic Reductive Dehalogenation treatment unit 2 (CRD2).

CRD2-E is the effluent from the last catalytic column in the Catalytic Reductive Dehalogenation treatment unit 2 (CRD2) and then reinjected at W-1610.

GTU01-I is a sampling port located immediately prior to GTU01, which is currently operating in the TFG-1 area.

GTU01-E is a sampling port located immediately after GTU01, which is currently operating in the TFG-1 area.

GTU01 receiving water is routinely sampled at the TFG-ASW location.

GTU03-I is a sampling port located immediately prior to GTU03, which is currently operating in the TF406 Northwest area.

GTU03-E is a sampling port located immediately after GTU03, which is currently operating in the TF406 Northwest area.

GTU03 receiving water is routinely sampled at the TFC-R003 location.

GTU07-I is a sampling port located immediately prior to GTU07, which is currently operating in the TFE Hotspot area.

GTU07-E is a sampling port located immediately after GTU07, which is currently operating in the TFE Hotspot area.

GTU07 receiving water is routinely sampled at the TFC-R003 location.

GTU09-I is a sampling port located immediately prior to GTU09, which is currently operating in the TF5475 area.

GTU09-E is a sampling port located immediately after GTU09, which is currently operating in the TF5475 area.

GTU09 receiving water is routinely sampled at the TFC-R003 location.

MTU02-I is a sampling port located immediately prior to MTU02, which is currently operating in the TFG North area.

MTU02-E is a sampling port located immediately after MTU02, which is currently operating in the TFG North area.

MTU02 receiving water is routinely sampled at the TFC-R003 location.

MTU03-I is a sampling port located immediately prior to MTU03, which is currently operating in the TFE Southwest area.

MTU03-E is a sampling port located immediately after MTU03, which is currently operating in the TFE Southwest area.

MTU03 receiving water is routinely sampled at the TFC-R003 location.

MTU04-I is a sampling port located immediately prior to MTU04, which is currently operating in the TFE Southeast area.

MTU04-E is a sampling port located immediately after MTU04, which is currently operating in the TFE Southeast area.

MTU04 receiving water is routinely sampled at the TFC-R003 location.

MTU05-I is a sampling port located immediately prior to MTU05, which is currently operating in the TFE West area.

MTU05-E is a sampling port located immediately after MTU05, which is currently operating in the TFE West area.

MTU05 receiving water is routinely sampled at the TFC-R003 location.

## Explanation of Abbreviations

MTU1-I is a sampling port located immediately prior to MTU1, which is currently operating in the TFC East area.

MTU1-E is a sampling port located immediately after MTU1, which is currently operating in the TFC East area.

MTU1 receiving water is routinely sampled at the TFC-R003 location.

PTU1-I is a sampling port located immediately prior to PTU-1, which is currently operating in the TFC Southeast area.

PTU1-E is a sampling port located immediately after PTU-1, which is currently operating in the TFC Southeast area.

PTU1 receiving water is routinely sampled at the TFC-R003 location.

PTU2-I is a sampling port located immediately prior to PTU-2, which is currently operating in the TFD South area.

PTU2-E is a sampling port located immediately after PTU-2, which is currently operating in the TFD South area.

PTU2 receiving water is routinely sampled at TFC-R003 during the wet season.

PTU3-I is a sampling port located immediately prior to PTU-3, which is currently operating in the TFE East area.

PTU3-E is a sampling port located immediately after PTU-3, which is currently operating in the TFE East area.

PTU3 receiving water is routinely sampled at the TFC-R003 location.

PTU5-I is a sampling port located immediately prior to PTU-5, which is currently operating in the TF406 extraction location.

PTU5-E is a sampling port located immediately after PTU-5, which is currently operating in the TF406 extraction location.

PTU5 receiving water is routinely sampled at the TFC-R003 location.

PTU6-I is a sampling port located immediately prior to PTU-6, which is currently operating in the TFD West area.

PTU6-E is a sampling port located immediately after PTU-6, which is currently operating in the TFD West area.

PTU6 receiving water is routinely sampled at the TFC-R003 location.

PTU8-I is a sampling port located immediately prior to PTU-8, which is currently operating in the TFD East area.

PTU8-E is a sampling port located immediately after PTU-8, which is currently operating in the TFD East area.

PTU8 receiving water is routinely sampled at the TFC-R003 location.

PTU9-I is a sampling port located immediately prior to PTU-9, which is currently operating in the TFE Northwest area.

PTU9-E is a sampling port located immediately after PTU-9, which is currently operating in the TFE Northwest area.

PTU9 receiving water is routinely sampled at the TFC-R003 location.

PTU10-I is a sampling port located immediately prior to PTU-10, which is currently operating in the TFD Helipad area.

PTU10-E is a sampling port located immediately after PTU-10, which is currently operating in the TFD Helipad area.

PTU10 receiving water is routinely sampled at the TFC-R003 location.

PTU11-I is a sampling port located immediately prior to PTU-11, which is currently operating in the TFD Southeast area.

PTU11-E is a sampling port located immediately after PTU-11, which is currently operating in the TFD Southeast area.

PTU11 receiving water is routinely sampled at the TFC-R003 location.

PTU12-I is a sampling port located immediately prior to PTU-12, which is currently operating in the TFD Southshore area.

PTU12-E is a sampling port located immediately after PTU-12, which is currently operating in the TFD Southshore area.

PTU12 receiving water is routinely sampled at the TFC-R003 location.

STU06-I is a sampling port located immediately prior to STU06, which is operating in the TFA East area.

STU06-E is a sampling port located immediately after STU06, which is operating in the TFA East area.

STU06 receiving water is routinely sampled at the TFG-ASW location.

STU09-I is a sampling port located immediately prior to STU09, which is currently operating in the TF518-North area.

STU09-E is a sampling port located immediately after STU09, which is currently operating in the TF518-North area.

STU09 receiving water is routinely sampled at the TFC-R003 location.



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**Attachment B**

**Self-Monitoring Reports**

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# Self-Monitoring Report

## LLNL Treatment Facility A (TFA)

### AREA TFA

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

December 31  
 January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 728

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-04-2010  
 Influent pH: 7.5  
 Effluent pH: 7.5  
 Effluent Temperature (°C): 18.3

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-408	922,900	23.9
W-109	1,278,400	29.8
W-457	245,100	5.9
W-522	0	0.0
W-614	437,100	10.2
W-712	320,700	7.4
W-714	347,100	8.0
W-904	1,491,800	32.7
W-415	1,684,000	40.7
W-518	0	0.0
W-903	0	0.0
W-605	378,900	8.7
W-262	0	0.0
W-1004	495,100	11.5
W-1009	1,014,500	22.7
W-1001	150,500	3.4
<hr/>		
Total:	<u>8,766,100</u>	<u>204.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>4,383,050</u>

**Self-Monitoring Report (cont'd)**  
**LLNL Treatment Facility A (TFA)**  
**AREA TFA**

Arroyo Seco

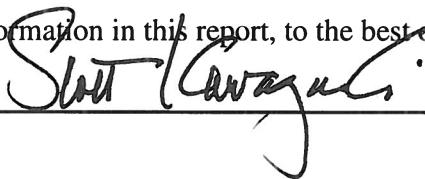
TFG-ASW

4,383,050

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: \_\_\_\_\_



Date: 01-29-2010

# Self-Monitoring Report

## LLNL Treatment Facility A (TFA)

### AREA TFA

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

January	<u>30</u>	<u>31</u>													
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>				

Total monthly time facility operated (hours): 682

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-02-2010</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>18</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-408	967,700	23.4
W-605	356,700	8.8
W-457	223,600	5.6
W-518	0	0.0
W-522	0	0.0
W-614	406,900	10.2
W-712	294,800	7.4
W-714	326,400	8.1
W-903	0	0.0
W-904	1,355,700	35.1
W-415	1,507,100	37.4
W-262	0	0.0
W-109	1,199,300	29.5
W-1009	973,000	24.1
W-1004	464,000	11.5
W-1001	146,700	3.6
Total:	<u>8,221,900</u>	<u>204.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>4,110,950</u>

**Self-Monitoring Report (cont'd)**  
**LLNL Treatment Facility A (TFA)**  
**AREA TFA**

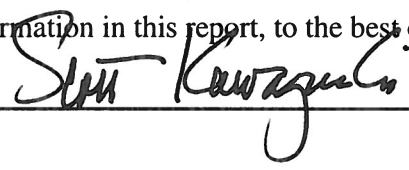
Arroyo Seco

TFG-ASW

4,110,950

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-28-2010

# Self-Monitoring Report

## LLNL Treatment Facility A (TFA)

### AREA TFA

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

February	<u>27</u>	<u>28</u>																											
March	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>														
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>													

Total monthly time facility operated (hours): 805

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>03-01-2010</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>17.8</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-408	1,235,500	26.5
W-605	410,600	8.8
W-457	292,900	5.8
W-518	0	0.0
W-522	0	0.0
W-614	471,200	10.0
W-712	336,500	7.2
W-714	379,900	8.0
W-415	1,775,800	37.2
W-109	1,496,600	31.3
W-1001	167,900	3.6
W-903	0	0.0
W-904	1,741,200	36.2
W-262	0	0.0
W-1009	1,111,400	23.6
W-1004	534,600	11.8
Total:	<u>9,954,100</u>	<u>210.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>4,977,050</u>

**Self-Monitoring Report (cont'd)**  
**LLNL Treatment Facility A (TFA)**  
**AREA TFA**

Arroyo Seco

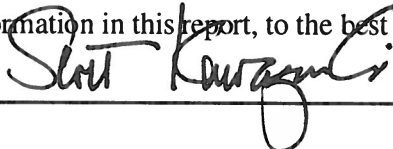
TFG-ASW

4,977,050

6. Comments:

W-408 accumulator not functioning. W-408 total estimated.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-03-2010

**Self-Monitoring Report**  
**LLNL Solar Treatment Unit 06 (STU06)**  
**AREA TFA-E**

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

December 31  
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28

Total monthly time facility operated (hours): 191

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-06-2010  
Influent pH: 7.5  
Effluent pH: 7.5  
Effluent Temperature (°C): 13.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-254	19,468	1.5
Total:	<u>19,468</u>	<u>1.5</u>

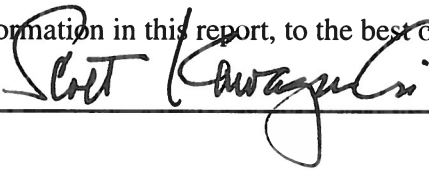
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>19,468</u>

6. Comments:

Switched from two pumps operating in W-254 to one pump on 1-5-10. System went down on 1-21-10 due to network problems. Unable to restart. Accumulator and hour readings estimated from sensorgraph.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 01-28-2010



**Self-Monitoring Report**  
**LLNL Solar Treatment Unit 06 (STU06)**  
**AREA TFA-E**

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

January	29	30	31																
February	01	<b>02</b>	<b>03</b>	<b>04</b>	<b>05</b>	<b>06</b>	<b>07</b>	<b>08</b>	<b>09</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>				
	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>								

Total monthly time facility operated (hours): 291

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-03-2010</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>16.1</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-254	24,843	1.4
Total:	<u>24,843</u>	<u>1.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>24,843</u>

6. Comments:

Strategy reloaded on 2-2-10 and facility restarted.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-28-2010

**Self-Monitoring Report**  
**LLNL Solar Treatment Unit 06 (STU06)**  
**AREA TFA-E**

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

February 27 28  
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 534

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-02-2010  
Influent pH: 7.0  
Effluent pH: 7.5  
Effluent Temperature (°C): 16

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-254	46,081	1.4
Total:	<u>46,081</u>	<u>1.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>46,081</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Scott Kawaguchi Date: 04-03-2010

**Self-Monitoring Report**  
**LLNL Treatment Facility B (TFB)**  
**AREA TFB**

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

December 31  
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28

Total monthly time facility operated (hours): 646

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-04-2010  
Influent pH: 7.0  
Effluent pH: 7.5  
Effluent Temperature (°C): 17.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-357	225,400	5.9
W-621	264,200	6.7
W-620	208,400	5.4
W-610	258,200	6.6
W-704	685,800	17.9
W-655	341,100	9.1
W-1423	191,000	4.7
Total:	<u>2,174,100</u>	<u>56.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>2,174,100</u>

6. Comments:

Facility down on 1-18-10 due to low air stripper flow. Restarted on 1-19-10.  
Facility down on 1-26-10 due to air stripper high level. Unable to restart.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Scott Kawaguchi Date: 01-28-2010

**Land Observation Report date:  
TFB-R002 - West Perimeter Drainage Channel**

1. Reporting Period: Business Month January Year 2010

2. Date compliance sampling performed 01-04-2010

3. Weather Conditions:

Average air tempertaure (°C):	<u>9.5</u>
6-day total precipitation (in):	<u>.01</u>
Average wind speed/direction (mph):	<u>3/ E</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>7.5</u>	<u>16.9</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 01-28-2010

**Self-Monitoring Report**  
**LLNL Treatment Facility B (TFB)**  
**AREA TFB**

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

January     29 30 31  
February   01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
                 16 17 18 19 20 21 22 23 24 25 26

Total monthly time facility operated (hours): 678

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-02-2010  
Influent pH: 7.0  
Effluent pH: 7.5  
Effluent Temperature (°C): 18

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-357	239,600	5.8
W-610	287,000	7.3
W-621	292,900	7.1
W-620	217,300	5.4
W-704	692,600	17.6
W-655	355,600	8.9
W-1423	208,100	5.2
Total:	<u>2,293,100</u>	<u>57.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>2,293,100</u>

6. Comments:

System started on 1-29-10.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Caragualis Date: 02-28-2010

**Land Observation Report date:**  
**TFB-R002 - West Perimeter Drainage Channel**

1. Reporting Period: Business Month February Year 2010

2. Date compliance sampling performed 02-02-2010

3. Weather Conditions:

Average air tempertaure (°C):	<u>9.2</u>
6-day total precipitation (in):	<u>.21</u>
Average wind speed/direction (mph):	<u>2/ SE</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-28-2010

**Self-Monitoring Report  
LLNL Treatment Facility B (TFB)  
AREA TFB**

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

February 27 28  
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 803

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-01-2010  
Influent pH: 7.0  
Effluent pH: 7.5  
Effluent Temperature (°C): 18

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-357	282,700	5.9
W-610	340,300	7.2
W-621	343,500	7.5
W-620	252,600	5.3
W-704	844,400	17.8
W-655	413,900	8.6
W-1423	241,600	5.2
Total:	<u>2,719,000</u>	<u>57.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>2,719,000</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-03-2010

**Land Observation Report date:  
TFB-R002 - West Perimeter Drainage Channel**

1. Reporting Period: Business Month March Year 2010

2. Date compliance sampling performed 03-01-2010

3. Weather Conditions:

Average air tempertaure (°C):	<u>11.4</u>
6-day total precipitation (in):	<u>.37</u>
Average wind speed/direction (mph):	<u>4/ SSE</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kuwaguchi Date: 04-03-2010



**Self-Monitoring Report  
LLNL Treatment Facility C (TFC)  
AREA TFC**

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

December	30	31															
January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15		
	16	17	18	19	20	21	22	23	24	25	26	27	28	<b><u>29</u></b>			

Total monthly time facility operated (hours): 1

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<b><u>01-29-2010</u></b>
Influent pH:	<b><u>7.0</u></b>
Effluent pH:	<b><u>7.5</u></b>
Effluent Temperature (°C):	<b><u>18.2</u></b>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-701	0	0.0
W-1015	436	5.5
W-1116	121	1.9
W-1103	313	4.1
W-1102	0	0.0
W-1104	1,919	23.2
Total:	<b><u>2,789</u></b>	<b><u>34.7</u></b>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<b><u>Arroyo Las Positas</u></b>	<b><u>TFC-R003</u></b>	<b><u>2,789</u></b>

6. Comments:

Facility upgrades completed. System started in day-only operations as part of Test and Verification Process on 1-29-10.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Scott Kawaguchi Date: **01-30-2010**

**Land Observation Report date:  
TFC-R003 - Arroyo Las Positas**

1. Reporting Period: Business Month January Year 2010

2. Date compliance sampling performed 01-29-2010

3. Weather Conditions:

Average air tempertaure (°C):	<u>8.7</u>
6-day total precipitation (in):	<u>.37</u>
Average wind speed/direction (mph):	<u>2/ SSE</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 01-30-2010

**Self-Monitoring Report**  
**LLNL Treatment Facility C (TFC)**  
**AREA TFC**

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

January	<u>30</u>	31																	
February	<u>01</u>	02	03	04	05	06	07	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	13	14	15				
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	20	21	22	23	24	25									

Total monthly time facility operated (hours): 54

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-10-2010</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>18.1</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-701	0	0.0
W-1015	20,896	6.7
W-1103	10,871	3.6
W-1104	81,712	25.8
W-1116	5,697	1.7
W-1102	2	0.0
Total:	<u>119,178</u>	<u>37.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>119,178</u>

6. Comments:

System operating during business hours only. System down from 2-2-10 through 2-7-10 for interlock checks. System secured on 2-19-10 to repair leaks on air stripper lids.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kawaguchi Date: 02-25-2010

**Land Observation Report date:  
TFC-R003 - Arroyo Las Positas**

1. Reporting Period: Business Month February Year 2010

2. Date compliance sampling performed 02-10-2010

3. Weather Conditions:

Average air tempertaure (°C):	<u>9.6</u>
6-day total precipitation (in):	<u>.66</u>
Average wind speed/direction (mph):	<u>4/ S</u>

4. Receiving Data:

Sample Location	pH	Temperature (C)
<u>Receiving Water</u>	<u>7.0</u>	<u>11.7</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-25-2010

# Self-Monitoring Report LLNL Treatment Facility C (TFC) AREA TFC

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

February	26	<u>27</u>	<u>28</u>																	
March	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	06	07	<u>08</u>	<u>09</u>	<u>10</u>	11	<u>12</u>	13	14	15					
	16	<u>17</u>	18	19	20	21	22	23	<u>24</u>	25	<u>26</u>	<u>27</u>	<u>28</u>	29	30	31				

Total monthly time facility operated (hours): 80

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>03-01-2010</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>18</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-701	0	0.0
W-1015	21,690	6.7
W-1103	10,987	3.7
W-1104	103,392	25.6
W-1116	6,974	1.8
W-1102	1,437	0.0
<hr/>		
Total:	<u>144,480</u>	<u>37.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>144,480</u>

6. Comments:

System run in day-only operation mode due to air flow instrumentation issues.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-31-2010

**Land Observation Report date:  
TFC-R003 - Arroyo Las Positas**

1. Reporting Period: Business Month March Year 2010

2. Date compliance sampling performed 03-01-2010

3. Weather Conditions:

Average air tempertaure (°C):	<u>11.4</u>
6-day total precipitation (in):	<u>.37</u>
Average wind speed/direction (mph):	<u>4/ SSE</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-31-2010

**Self-Monitoring Report**  
**LLNL Mini Treatment Unit 1 (MTU1)**  
**AREA TFC-E**

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

December 31  
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
<b>W-413</b>	<b>0</b>	<b>0.0</b>
<b>W-368</b>	<b>0</b>	<b>0.0</b>
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

Facility was down waiting for resin columns to be conditioned. Due to TFC main facility being down for up grades conditioning could not be completed.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Albert Vnday Date: 01-30-2010

**Self-Monitoring Report**  
**LLNL Mini Treatment Unit 1 (MTU1)**  
**AREA TFC-E**

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

January	30	31													
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>				

Total monthly time facility operated (hours): 590

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-02-2010</u>
Influent pH:	<u>6.5</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>19.8</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-413	604,392	16.9
W-368	197,619	5.5
Total:	<u>802,011</u>	<u>22.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>802,011</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-01-2010



**Self-Monitoring Report**  
**LLNL Mini Treatment Unit 1 (MTU1)**  
**AREA TFC-E**

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

February 27 28  
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 692

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-03-2010  
Influent pH: 6.5  
Effluent pH: 7.0  
Effluent Temperature (°C): 20.1

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-413	721,825	17.4
W-368	239,051	5.7
Total:	<u>960,876</u>	<u>23.1</u>


5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>960,876</u>

6. Comments:

Facility was down on February 27 and 28 for resin work and was restarted on March 1 at 1400 hours. Facility was down again from March 27 at 1100 hours and restarted March 28 at 1200 hours.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-01-2010

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 1 (PTU1)**  
**AREA TFC-SE**

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

December 31  
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 587

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-05-2010  
Influent pH: 7.0  
Effluent pH: 7.5  
Effluent Temperature (°C): 19.7

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1213	279,559	8.0
W-2201	424,780	12.2
Total:	<u>704,339</u>	<u>20.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>704,339</u>

6. Comments:

System secured on 1-8-10 to repair leak. System restarted on 1-11-10. System secured on 1-13-10 to repair leak. System restarted on 1-14-10. System went down on 1-23-10 due to possible power surge. Restarted system on 1-25-10. System secured on 1-29-10 due to spent ion exchange columns.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Scott Cowagen Date: 01-29-2010

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 1 (PTU1)**  
**AREA TFC-SE**

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

January	<u>30</u>	<u>31</u>														
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>					

Total monthly time facility operated (hours): 653

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-02-2010</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>19.7</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1213	311,181	8.1
W-2201	472,037	12.2
Total:	<u>783,218</u>	<u>20.3</u>

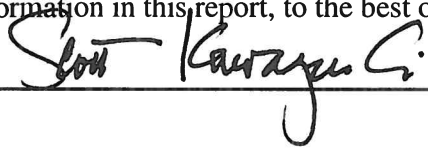
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>783,218</u>

6. Comments:

New ion exchange columns installed and facility restarted on 1-30-10.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-26-2010

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 1 (PTU1)**  
**AREA TFC-SE**

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

February 27 28  
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 800

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-02-2010  
Influent pH: 7.0  
Effluent pH: 7.5  
Effluent Temperature (°C): 20.1

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1213	382,435	8.0
W-2201	578,447	12.2
Total:	<u>960,882</u>	<u>20.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>960,882</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Scott Kawaguchi Date: 03-31-2010

# Self-Monitoring Report

## LLNL Treatment Facility D (TFD)

### AREA TFD

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

December 31  
 January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 728

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-05-2010  
 Influent pH: 7.0  
 Effluent pH: 7.5  
 Effluent Temperature (°C): 18.3

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-906	175,000	4.1
W-907-2	0	0.0
W-351	48,000	1.1
W-653	8,400	0.2
W-1206	33,300	11.5
W-1208	1,014,900	23.7
W-2011	0	0.0
W-2101	7,500	0.4
W-2102	0	0.0
Total:	<u>1,287,100</u>	<u>41.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,287,100</u>

6. Comments:

Started W-1206 on 1-5-10. W-1206 down on 1-8-10 due to breaker trip. W-1206 to remain down. W-2101 secured on 1-11-10 due to flow meter failure.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

**Self-Monitoring Report (cont'd)**  
**LLNL Treatment Facility D (TFD)**  
**AREA TFD**

Operator Signature: Scott Kavanagh Date: 01-30-2010

**Self-Monitoring Report  
LLNL Treatment Facility D (TFD)  
AREA TFD**

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

January 30 31  
February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25

Total monthly time facility operated (hours): 520

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-01-2010  
Influent pH: 7.0  
Effluent pH: 7.5  
Effluent Temperature (°C): 20.6

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-907-2	0	0.0
W-653	6,600	0.1
W-906	124,000	4.0
W-351	36,000	1.2
W-1206	0	0.0
W-1208	714,300	23.3
W-2101	0	0.0
W-2102	0	0.0
W-2011	0	0.0
Total:	<u>880,900</u>	<u>28.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>880,900</u>

6. Comments:

Facility down on 2-8-10 due to high manifold pressure. Restarted on 2-8-10.  
Facility down on 2-19-10 due to high manifold pressure. Restarted on 2-22-10.  
Secured system on 2-22-10 to descale air strippers.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

**Self-Monitoring Report (cont'd)**  
**LLNL Treatment Facility D (TFD)**  
**AREA TFD**

Operator Signature:  Date: 02-25-2010



# Self-Monitoring Report LLNL Treatment Facility D (TFD) AREA TFD

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

February	26	27	28																			
March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15							
	16	17	18	<b><u>19</u></b>	20	21	22	23	24	25	26	27	28	29	30	31						

Total monthly time facility operated (hours): 7

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<b><u>03-19-2010</u></b>
Influent pH:	<b><u>7.0</u></b>
Effluent pH:	<b><u>7.5</u></b>
Effluent Temperature (°C):	<b><u>20.4</u></b>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-907-2	0	0.0
W-653	100	0.0
W-906	1,600	4.0
W-351	400	1.1
W-1206	0	0.0
W-1208	9,100	23.2
W-2101	0	0.0
W-2102	0	0.0
W-2011	0	0.0
Total:	<b><u>11,200</u></b>	<b><u>28.3</u></b>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<b><u>Arroyo Las Positas</u></b>	<b><u>TFC-R003</u></b>	<b><u>11,200</u></b>

6. Comments:

Air stripper descaling and lid modifications completed on 3-19-10 and facility started. Leaks detected in tanks and system secured on 3-19-10.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

**Self-Monitoring Report (cont'd)**  
**LLNL Treatment Facility D (TFD)**  
**AREA TFD**

Operator Signature: \_\_\_\_\_

*Scott Lawrence*

Date: 03-31-2010

# Self-Monitoring Report

## LLNL Portable Treatment Unit 8 (PTU8)

### AREA TFD-E

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

December 31  
 January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 671

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-06-2010  
 Influent pH: 7.5  
 Effluent pH: 7.5  
 Effluent Temperature (°C): 16.1

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1253	0	0.0
W-1255	0	0.0
W-1301	37,800	0.9
W-1404	23,100	0.5
W-1550	37,100	1.8
W-1307	248,400	6.2
W-1306	10,100	0.3
W-1303	0	0.0
W-2006	400	0.0
W-2203	0	0.0
Total:	<u>356,900</u>	<u>9.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>356,900</u>

6. Comments:

Facility down on 1-18-10 due to low flow. Restarted on 1-19-10. Facility down on 1-19-10 due to low flow. Restarted on 1-20-10. Hours operated estimated from logbook.

**Self-Monitoring Report (cont'd)**  
**LLNL Portable Treatment Unit 8 (PTU8)**  
**AREA TFD-E**

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 01-30-2010

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 8 (PTU8)**  
**AREA TFD-E**

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

January	<u>30</u>	<u>31</u>													
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>				

Total monthly time facility operated (hours): 665

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-01-2010</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>21.5</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1255	0	0.0
W-1253	0	0.0
W-1307	243,700	6.1
W-1303	0	0.0
W-1550	74,100	1.9
W-1306	10,700	0.2
W-1301	36,900	0.9
W-1404	16,500	0.5
W-2006	400	0.3
W-2203	0	0.0
Total:	<u>382,300</u>	<u>9.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>382,300</u>

6. Comments:

Facility operational hours estimated from logbook.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

**Self-Monitoring Report (cont'd)**  
**LLNL Portable Treatment Unit 8 (PTU8)**  
**AREA TFD-E**

Operator Signature: Scott Karaguzli Date: 02-28-2010

# Self-Monitoring Report

## LLNL Portable Treatment Unit 8 (PTU8)

### AREA TFD-E

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

February	<u>27</u>	<u>28</u>																								
March	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>											
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>										

Total monthly time facility operated (hours): 772

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>03-02-2010</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>18.2</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1253	0	0.0
W-1255	0	0.0
W-1307	281,300	6.1
W-1550	82,400	1.8
W-1306	10,300	0.3
W-1301	48,000	0.9
W-1404	6,000	0.4
W-1303	0	0.0
W-2006	100	0.2
W-2203	0	0.0
Total:	<u>428,100</u>	<u>9.7</u>

5. Discharge Information:

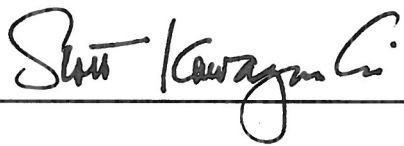
<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>428,100</u>

6. Comments:

Facility went down on 3-11-10 due to breaker trip. Facility restarted on 3-12-10.  
Facility hours estimated from logbook.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

**Self-Monitoring Report (cont'd)**  
**LLNL Portable Treatment Unit 8 (PTU8)**  
**AREA TFD-E**

Operator Signature:  Date: 04-03-2010



# Self-Monitoring Report

## LLNL Portable Treatment Unit 10 (PTU10)

### AREA TFD-HPD

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

December 31  
 January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 728

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-13-2010  
 Influent pH: 7.5  
 Effluent pH: 7.6  
 Effluent Temperature (°C): 17.8

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1254	651,900	15.0
W-1653	0	0.0
W-1657	0	0.0
W-1654	0	0.0
W-1655	0	0.0
W-1551	0	0.0
W-1650	0	0.0
W-1652	0	0.0
W-1552	0	0.0
W-1651	0	0.0
W-1656	0	0.0
Total:	<u>651,900</u>	<u>15.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>651,900</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy D. Kuhl Date: 02-01-2010

# Self-Monitoring Report

## LLNL Portable Treatment Unit 10 (PTU10)

### AREA TFD-HPD

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

January	<u>30</u>	<u>31</u>															
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>		
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>						

Total monthly time facility operated (hours): 640

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-03-2010</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>19.6</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1254	<b>571,993</b>	<b>15.0</b>
W-1650	0	0.0
W-1651	0	0.0
W-1653	0	0.0
W-1654	0	0.0
W-1656	0	0.0
W-1657	0	0.0
W-1551	0	0.0
W-1652	0	0.0
W-1552	0	0.0
W-1655	0	0.0
Total:	<u><b>571,993</b></u>	<u><b>15.0</b></u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>571,993</u>

6. Comments:

The facility was shutdown for approximately 20 hrs. (2/13/10, 2/19/10, and 2/20/10) to allow workmen to in- stall AC / heat pump unit.

**Self-Monitoring Report (cont'd)**  
**LLNL Portable Treatment Unit 10 (PTU10)**  
**AREA TFD-HPD**

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy D. Kuhl Date: 03-01-2010

# Self-Monitoring Report

## LLNL Portable Treatment Unit 10 (PTU10)

### AREA TFD-HPD

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

February	<u>27</u>	<u>28</u>																							
March	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>										
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>									

Total monthly time facility operated (hours): 799

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>03-03-2010</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>18.5</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1254	711,228	15.0
W-1650	0	0.0
W-1651	0	0.0
W-1653	0	0.0
W-1654	0	0.0
W-1656	0	0.0
W-1657	0	0.0
W-1551	0	0.0
W-1652	0	0.0
W-1552	0	0.0
W-1655	0	0.0
Total:	<u>711,228</u>	<u>15.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>711,228</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

**Self-Monitoring Report (cont'd)**  
**LLNL Portable Treatment Unit 10 (PTU10)**  
**AREA TFD-HPD**

Operator Signature: Billy O. Kuhl Date: 04-01-2010

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 2 (PTU2)**  
**AREA TFD-S**

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

December 31  
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 300

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-20-2010  
Influent pH: 7.5  
Effluent pH: 7.5  
Effluent Temperature (°C): 20.5

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1503	321,760	18.5
W-1510	177,904	10.2
W-1504	145,620	8.3
Total:	<u>645,284</u>	<u>37.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>645,284</u>

6. Comments:

System secured from 1/11/10 to 1/20/10 and 1/20/10 through 1/29/10 due to drilling activities nearby. System was started on 1/20/10 to collect January 2010 compliance readings and samples.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 01-29-2010

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 2 (PTU2)**  
**AREA TFD-S**

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

January	30	31														
February	01	02	03	04	05	06	07	08	09	10	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>					

Total monthly time facility operated (hours): 364

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-11-2010</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>20.8</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1503	208,176	0.0
W-1510	217,954	10.0
W-1504	181,811	8.6
Total:	<u>607,941</u>	<u>18.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>607,941</u>

6. Comments:

System secured from 1/20/10 to 2/11/10 due to drilling activities nearby.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-26-2010



**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 2 (PTU2)**  
**AREA TFD-S**

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

February 27 28  
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 803

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-03-2010  
Influent pH: 7.5  
Effluent pH: 7.5  
Effluent Temperature (°C): 20.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1503	871,768	18.2
W-1510	373,156	9.9
W-1504	392,806	8.1
Total:	<u>1,637,730</u>	<u>36.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,637,730</u>

6. Comments:

Well W-1510 operation intermittent due to flow meter malfunction.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-06-2010

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 11 (PTU11)**  
**AREA TFD-SE**

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

December 31  
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 729

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-06-2010  
Influent pH: 7.0  
Effluent pH: 7.0  
Effluent Temperature (°C): 17.6

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-314	87,527	0.0
W-1308	111,944	2.6
W-1904	0	0.0
W-1403	0	0.0
W-2005	15,115	0.3
SIP-ETC-201	0	0.0
Total:	<u>214,586</u>	<u>2.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>214,586</u>

6. Comments:

W-314 extraction well started 1/14/10. Operations were suspended 1/21/10 due to leak at well sanitary seal. Leak was repaired 1/28/10, and W-314 was restarted 1/28/10.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 02-02-2010

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 11 (PTU11)**  
**AREA TFD-SE**

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

January	<u>30</u>	<u>31</u>													
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>				

Total monthly time facility operated (hours): 648

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-03-2010</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>20.3</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-314	395,919	12.0
W-1308	97,709	2.5
W-1904	0	0.0
W-1403	0	0.0
W-2005	10,918	0.2
SIP-ETC-201	0	0.0
Total:	<u>504,546</u>	<u>14.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>504,546</u>

6. Comments:

Found facility shutdown 2/2/10 @ 08:38 hrs. due to system leak alarm caused by the removal of W-1403 well pump. Facility was restarted 2/2 @ 14:38 hrs. Facility was secured 2/12/10 @ 13:30 hrs. to install air conditioning unit inside PTU-11. Facility was restarted 2/13/10 @ 13:20 hrs. In accordance with W-314 start-up plan, flow rates for this extraction well varied during reporting month due to efforts to evaluate pump performance.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

**Self-Monitoring Report (cont'd)**  
**LLNL Portable Treatment Unit 11 (PTU11)**  
**AREA TFD-SE**

Operator Signature:  Date: 03-01-2010

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 11 (PTU11)**  
**AREA TFD-SE**

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

February 27 28  
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 769

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-27-2010  
Influent pH: 7.0  
Effluent pH: 7.0  
Effluent Temperature (°C): 18.7

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-314	467,229	9.8
W-1308	123,721	2.6
W-1904	0	0.0
W-1403	0	0.0
W-2005	10,806	0.2
SIP-ETC-201	0	0.0
Total:	<u>601,756</u>	<u>12.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>601,756</u>

6. Comments:

Facility secured 3/9/10 for HVAC installation. Facility was restarted 3/10/10 @ 10:00 AM.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Homan Date: 03-31-2010

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 12 (PTU12)**  
**AREA TFD-SS**

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

December 31  
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 469

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-19-2010  
Influent pH: 7.5  
Effluent pH: 7.5  
Effluent Temperature (°C): 18.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1523	92,730	0.0
W-1603	197,213	13.4
W-1602	63,697	0.0
W-1601	15,563	0.0
Total:	<u>369,203</u>	<u>13.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>369,203</u>

6. Comments:

System secure from 1/8/10 to 1/19/10 for discharge pump and W-1603 influent pipeline repair.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 01-30-2010

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 12 (PTU12)**  
**AREA TFD-SS**

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

January	<u>30</u>	<u>31</u>													
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>				

Total monthly time facility operated (hours): 665

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-11-2010</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>19.4</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1523	0	0.0
W-1603	537,071	13.3
W-1602	6,888	0.0
W-1601	1,404	0.0
Total:	<u>545,363</u>	<u>13.3</u>

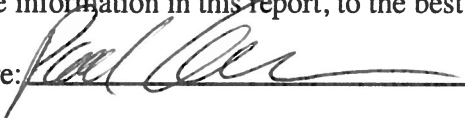
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>545,363</u>

6. Comments:

Air stripper maintenance performed on 2/4/10.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-02-2010

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 12 (PTU12)**  
**AREA TFD-SS**

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

February 27 28  
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 802

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-11-2010  
Influent pH: 7.5  
Effluent pH: 7.5  
Effluent Temperature (°C): 20

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1523	123,063	0.0
W-1603	652,197	13.8
W-1602	250,151	5.0
W-1601	48,084	0.9
Total:	<u>1,073,495</u>	<u>19.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,073,495</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-07-2010



**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 6 (PTU6)**  
**AREA TFD-W**

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

December 31  
January 01 02 03 04 05 06 07 08 09 10 **11** 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): **5**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **01-11-2010**  
Influent pH: **7.5**  
Effluent pH: **7.5**  
Effluent Temperature (°C): **20.1**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1216	<b>0</b>	<b>0.0</b>
W-1215	<b>0</b>	<b>0.0</b>
W-1902	<b>5,298</b>	<b>17.0</b>
Total:	<u><b>5,298</b></u>	<u><b>17.0</b></u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u><b>Arroyo Las Positas</b></u>	<u><b>TFC-R003</b></u>	<u><b>5,298</b></u>

6. Comments:

System secure from 12/30/09 to 1/11/10 and 1/11/10 through 1/29/10 for pending electronic repairs to the system interlock controls. The system was started on 1/11/10 to collect January 2010 compliance readings and samples.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **01-29-2010**

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 6 (PTU6)**  
**AREA TFD-W**

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

January	30	31													
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	<b><u>17</u></b>	18	19	20	21	22	23	24	25	26				

Total monthly time facility operated (hours): 12

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<b><u>02-17-2010</u></b>
Influent pH:	<b><u>7.5</u></b>
Effluent pH:	<b><u>7.5</u></b>
Effluent Temperature (°C):	<b><u>21.5</u></b>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1215	0	0.0
W-1216	0	0.0
W-1902	12,754	18.7
Total:	<b><u>12,754</u></b>	<b><u>18.7</u></b>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<b><u>Arroyo Las Positas</u></b>	<b><u>TFC-R003</u></b>	<b><u>12,754</u></b>

6. Comments:

System secure from 1/11/10 to 2/17/10 and 2/17/10 through 2/26/10 for pending electronic repairs to the system interlock controls. The system was started on 2/17/10 to collect February 2010 compliance readings and samples.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **02-26-2010**

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 6 (PTU6)**  
**AREA TFD-W**

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

February	27	28																			
March	01	02	03	04	<u>05</u>	06	07	08	09	10	11	12	13	14	<u>15</u>						
	16	17	18	<u>19</u>	20	21	22	23	24	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	30	<u>31</u>					

Total monthly time facility operated (hours): 104

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>03-15-2010</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>21</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1215	268	0.0
W-1216	215	10.8
W-1902	82,615	0.0
Total:	<u>83,098</u>	<u>10.8</u>

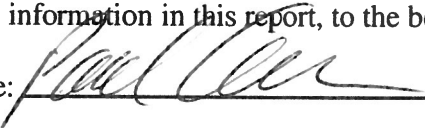
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>83,098</u>

6. Comments:

System operations for the month of March were limited to Testing and Verification (T & V), initial wellhead sampling, and facility compliance sampling.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-06-2010

# Self-Monitoring Report

## LLNL Vapor Extraction System 11 (VES11)

### AREA VTFD-ETCS

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treatment facility operated


December 31  
 January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1904	0	0.0	0	0	0
W-ETC-2004A	247,179	5.7	-5.98	50	732
W-ETC-2003	622,954	14.1	-3.07	50	732
W-ETC-2004B	286,423	5.9	-3.87	50	732
SIP-ETC-201	0	0.0	0	0	0
Total:	<u>1,156,556</u>	<u>25.7</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-01-2010

# Self-Monitoring Report

## LLNL Vapor Extraction System 11 (VES11)

### AREA VTFD-ETCS

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

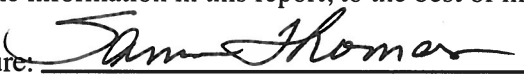
January	<u>30</u>	<u>31</u>														
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>					

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
<b>W-1904</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>W-ETC-2004A</b>	<b>229,504</b>	<b>5.6</b>	<b>-6.03</b>	<b>50</b>	<b>680</b>
<b>W-ETC-2004B</b>	<b>249,764</b>	<b>6.0</b>	<b>-3.92</b>	<b>50</b>	<b>680</b>
<b>W-ETC-2003</b>	<b>541,099</b>	<b>13.0</b>	<b>-4.34</b>	<b>50</b>	<b>680</b>
<b>SIP-ETC-201</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total:</b>	<b><u>1,020,367</u></b>	<b><u>24.6</u></b>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **03-01-2010**

# Self-Monitoring Report

## LLNL Vapor Extraction System 11 (VES11)

### AREA VTFD-ETCS

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

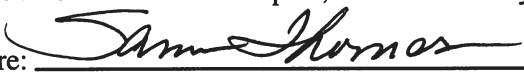
February	<u>27</u>	<u>28</u>																								
March	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>											
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>										

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1904	0	0.0	0	0	0
W-ETC-2004A	269,138	5.6	-6.03	50	804
W-ETC-2004B	282,358	4.8	-4.01	50	804
W-ETC-2003	611,445	12.7	-4.96	50	804
SIP-ETC-201	0	0.0	0	0	0
<div style="display: flex; justify-content: space-between;"> <span>Total:</span> <span><u>1,162,941</u></span> <span><u>23.1</u></span> </div>					

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-13-2010

# Self-Monitoring Report

## LLNL Vapor Extraction System 07 (VES07)

### AREA VTFD-HPD

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

December 31  
 January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29

3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-1651	0	0.0	0	0	0
W-1653	0	0.0	0	0	0
W-1657	0	0.0	0	0	0
W-1654	0	0.0	0	0	0
W-1652	0	0.0	0	0	0
W-1552	0	0.0	0	0	0
W-1655	0	0.0	0	0	0
W-1656	0	0.0	0	0	0
W-1650	0	0.0	0	0	0
W-HPA-002A	744,879	17.0	-23.9	66	732
W-HPA-002B	0	0.0	0	0	0
Total:	<u>744,879</u>	<u>17.0</u>			

4. Comments:  
 NA

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy D. Kilduff Date: 02-01-2010

# Self-Monitoring Report

## LLNL Vapor Extraction System 07 (VES07)

### AREA VTFD-HPD

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

January	<u>30</u>	<u>31</u>														
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>					

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1552	0	0.0	0	0	0
W-1650	0	0.0	0	0	0
W-1651	0	0.0	0	0	0
W-1653	0	0.0	0	0	0
W-1654	0	0.0	0	0	0
W-1652	0	0.0	0	0	0
W-1656	0	0.0	0	0	0
W-1657	0	0.0	0	0	0
W-1655	0	0.0	0	0	0
W-HPA-002A	679,462	16.9	-23.9	61	682
W-HPA-002B	0	0.0	0	0	0
<hr/>					
Total:	<u>679,462</u>	<u>16.9</u>			

4. Comments:  
NA

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy O. Kish Date: 03-01-2010



# Self-Monitoring Report

## LLNL Vapor Extraction System 07 (VES07)

### AREA VTFD-HPD

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

February	<u>27</u>	<u>28</u>																													
March	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>																
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>															

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1552	0	0.0	0	0	0
W-1650	0	0.0	0	0	0
W-1651	0	0.0	0	0	0
W-1653	0	0.0	0	0	0
W-1654	0	0.0	0	0	0
W-1652	0	0.0	0	0	0
W-1656	0	0.0	0	0	0
W-1657	0	0.0	0	0	0
W-1655	0	0.0	0	0	0
W-HPA-002A	849,476	17.6	-23.9	70	802
W-HPA-002B	0	0.0	0	0	0
<hr/>					
Total:	<u>849,476</u>	<u>17.6</u>			

4. Comments:  
NA

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy D. Kuhl Date: 04-01-2010

**Self-Monitoring Report**  
**LLNL Vapor Extraction System 13 (VES13)**  
**AREA VTFD-HS**

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

December 31  
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29

3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-653	9,286	0.1	-27.3	65	718
W-2011	0	0.0	0	0	718
W-2101	2,808	0.1	-27.3	65	718
W-2102	0	0.0	0	0	718
Total:	<u>12,094</u>	<u>0.2</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kawaguchi Date: 01-29-2010

# Self-Monitoring Report

## LLNL Vapor Extraction System 13 (VES13)

### AREA VTFD-HS

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

January	<u><b>30</b></u>	<u><b>31</b></u>															
February	<u><b>01</b></u>	<u><b>02</b></u>	<u><b>03</b></u>	<u><b>04</b></u>	<u><b>05</b></u>	<u><b>06</b></u>	<u><b>07</b></u>	<u><b>08</b></u>	<u><b>09</b></u>	<u><b>10</b></u>	<u><b>11</b></u>	<u><b>12</b></u>	<u><b>13</b></u>	<u><b>14</b></u>	<u><b>15</b></u>		
	<u><b>16</b></u>	<u><b>17</b></u>	<u><b>18</b></u>	<u><b>19</b></u>	<u><b>20</b></u>	<u><b>21</b></u>	<u><b>22</b></u>	<u>23</u>	<u>24</u>	<u>25</u>							

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
<b>W-653</b>	<b>6,732</b>	<b>0.2</b>	<b>-27.6</b>	<b>64</b>	<b>580</b>
<b>W-2101</b>	<b>2,371</b>	<b>0.1</b>	<b>-27.6</b>	<b>84</b>	<b>580</b>
<b>W-2102</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>W-2011</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
 Total:	 <u><b>9,103</b></u>	 <u><b>0.2</b></u>			

4. Comments:

Secured extraction from W-2101 on 2-18-10 since the pump was not extracting water from the well. Both VES13 and TFD were secured on 2-22.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: *Steve Kawaguchi* Date: **03-02-2010**

# Self-Monitoring Report

## LLNL Vapor Extraction System 13 (VES13)

### AREA VTFD-HS

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

February	26	27	28																												
March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15																
	16	17	18	<b><u>19</u></b>	20	21	22	23	24	25	26	27	28	29	30	31															

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-653	111	0.3	-27.5	64	6
W-2101	0	0.0	0	0	0
W-2102	0	0.0	0	0	0
W-2011	0	0.0	0	0	0
<hr/>					
Total:	<b><u>111</u></b>	<b><u>0.3</u></b>			

4. Comments:

System started on 9-19-10 in conjunction with TFD ground water treatment system. Secured on 9-19-10 as TFD ground water system was secured.  
Accumulator reading is an estimate due to software issues.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-13-2010

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 3 (PTU3)**  
**AREA TFE-E**

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

December 31  
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
          16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 617

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-13-2010  
Influent pH: 7.5  
Effluent pH: 7.5  
Effluent Temperature (°C): 21.1

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-566	277,787	7.5
W-1109	83,704	2.2
W-1903	0	0.0
W-1909	0	0.0
W-2305	179	0.0
Total:	<u>361,670</u>	<u>9.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>361,670</u>

6. Comments:

System secure for 1/14/10 to 1/19/10 for drainage ditch cleaning.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 01-29-2010

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 3 (PTU3)**  
**AREA TFE-E**

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

January	<u>30</u>	<u>31</u>													
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	12	13	14	15
	<u>16</u>	17	18	19	20	21	22	23	24	25	26				

Total monthly time facility operated (hours): 315

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-16-2010</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>21.4</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-566	140,530	8.2
W-1109	43,036	1.9
W-1903	0	0.0
W-1909	0	0.0
W-2305	86	1.6
Total:	<u>183,652</u>	<u>11.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>183,652</u>

6. Comments:

System secure from 2/11/10 to 2/16/10 and from 2/16/10 through 2/26/10 for drilling activities nearby.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-26-2010

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 3 (PTU3)**  
**AREA TFE-E**

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

February 27 28  
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 534

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-11-2010  
Influent pH: 7.5  
Effluent pH: 7.5  
Effluent Temperature (°C): 21.5

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-566	259,279	8.2
W-1109	76,302	2.3
W-1903	0	0.0
W-1909	0	0.0
W-2305	76	1.7
Total:	<u>335,657</u>	<u>12.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>335,657</u>

6. Comments:

System secure from 2/27/10 to 3/8/10 for drilling activities nearby. System secure from 3/30/10 through 3/31/10 due to power failure.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-06-2010

**Self-Monitoring Report**  
**LLNL GAC Treatment Unit 07 (GTU07)**  
**AREA TFE-HS**

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

December 31  
January 01 02 03 04 05 06 **07** 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 1

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **01-07-2010**  
Influent pH: **7.5**  
Effluent pH: **7.5**  
Effluent Temperature (°C): **12.5**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
<b>W-2012</b>	<b>137</b>	<b>2.5</b>
<b>W-2105</b>	<b>0</b>	<b>0.0</b>
Total:	<u><b>137</b></u>	<u><b>2.5</b></u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u><b>Arroyo Las Positas</b></u>	<u><b>TFC-R003</b></u>	<u><b>137</b></u>

6. Comments:

System secure pending well pump and controller replacement. System was operated on 1/7/10 to collect monthly, quarterly, and annual compliance samples.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **02-01-2010**



**Self-Monitoring Report**  
**LLNL GAC Treatment Unit 07 (GTU07)**  
**AREA TFE-HS**

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

January	30	31													
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26				

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-2105	0	0.0
W-2012	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

System secure pending well pump and controller replacement.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-26-2010

**Self-Monitoring Report**  
**LLNL GAC Treatment Unit 07 (GTU07)**  
**AREA TFE-HS**

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

February	27	28																	
March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15				
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-2105	0	0.0
W-2012	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

System secure pending well pump and controller replacement.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-06-2010

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 9 (PTU9)**  
**AREA TFE-NW**

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

December 31  
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 614

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-11-2010  
Influent pH: 7.5  
Effluent pH: 7.5  
Effluent Temperature (°C): 21.2

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1211	624,494	17.0
W-1409	0	0.0
Total:	<u>624,494</u>	<u>17.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>624,494</u>

6. Comments:

System secure from 1/6/10 to 1/11/10 for repairs to W-1211 influent pipeline and painting activities at the facility.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 01-29-2010

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 9 (PTU9)**  
**AREA TFE-NW**

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

January	<u>30</u>	<u>31</u>															
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>		
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>						

Total monthly time facility operated (hours): 666

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-11-2010</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>21</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1211	688,513	17.4
W-1409	0	0.0
Total:	<u>688,513</u>	<u>17.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>688,513</u>

6. Comments:

System secure for 5 hours on 2/19/10 and 7 hours on 2/20/10 for new A/C installation.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature  Date: 03-01-2010

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 9 (PTU9)**  
**AREA TFE-NW**

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

February	<u>27</u>	<u>28</u>																													
March	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>																
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>															

Total monthly time facility operated (hours): 791

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>03-03-2010</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>21.1</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1211	831,781	16.3
W-1409	0	0.0
Total:	<u>831,781</u>	<u>16.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>831,781</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-06-2010

**Self-Monitoring Report**  
**LLNL Mini Treatment Unit 04 (MTU04)**  
**AREA TFE-SE**

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

December 31  
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 711

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-11-2010  
Influent pH: 7.0  
Effluent pH: 7.0  
Effluent Temperature (°C): 18.3

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-359	351,434	8.2
Total:	<u>351,434</u>	<u>8.2</u>

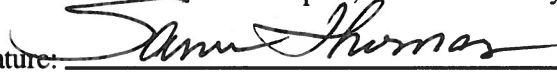
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>351,434</u>

6. Comments:

Facility was shutdown for network upgrade 1/13/10 @ 13:50, and restarted 15:00 hours.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-01-2010

**Self-Monitoring Report**  
**LLNL Mini Treatment Unit 04 (MTU04)**  
**AREA TFE-SE**

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

January	<u>30</u>	<u>31</u>														
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>					

Total monthly time facility operated (hours): 668

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-03-2010</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>19.9</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-359	<u>328,577</u>	<u>8.2</u>
Total:	<u>328,577</u>	<u>8.2</u>

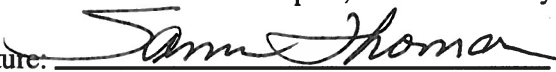
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>328,577</u>

6. Comments:

Facility was shutdown 2/4/10 @ 09:30 hrs. to perform maintenance to air stripper.  
Facility was restarted @ 09:47 hrs.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-01-2010

**Self-Monitoring Report**  
**LLNL Mini Treatment Unit 04 (MTU04)**  
**AREA TFE-SE**

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

February	<u>27</u>	<u>28</u>																													
March	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>																
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>															

Total monthly time facility operated (hours): 788

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-27-2010</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>19.7</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-359	393,838	8.2
Total:	<u>393,838</u>	<u>8.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>393,838</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-31-2010



**Self-Monitoring Report**  
**LLNL Mini Treatment Unit 03 (MTU03)**  
**AREA TFE-SW**

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

December	<u>30</u>	<u>31</u>															
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	05	06	07	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	15		
	16	17	18	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>			

Total monthly time facility operated (hours): 505

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-13-2010</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.6</u>
Effluent Temperature (°C):	<u>19.4</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1520	0	0.0
W-1518	53,768	1.8
W-1522	0	0.0
Total:	<u>53,768</u>	<u>1.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>53,768</u>

6. Comments:

The facility was down for a few days to change out the vapor GAC's and repair a section of the W-1518 wellhead line. The facility was also down for a few days for the frog investigation ditch cleaning project.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy D. Hild Date: 02-01-2010

**Self-Monitoring Report**  
**LLNL Mini Treatment Unit 03 (MTU03)**  
**AREA TFE-SW**

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

January     30 31  
February   01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
                 16 17 18 19 20 21 22 23 24 25 26

Total monthly time facility operated (hours): 664

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-03-2010  
Influent pH: 7.5  
Effluent pH: 7.5  
Effluent Temperature (°C): 20.2

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1518	70,929	1.8
W-1522	0	0.0
W-1520	0	0.0
Total:	<u>70,929</u>	<u>1.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>70,929</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy O. Kuhl Jr. Date: 03-01-2010

**Self-Monitoring Report**  
**LLNL Mini Treatment Unit 03 (MTU03)**  
**AREA TFE-SW**

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

February	<u>27</u>	<u>28</u>																								
March	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>											
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>										

Total monthly time facility operated (hours): 790

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>03-03-2010</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>16.3</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1518	85,999	1.8
W-1522	0	0.0
W-1520	0	0.0
Total:	<u>85,999</u>	<u>1.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>85,999</u>

6. Comments:  
NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy D. Fildes Date: 04-01-2010

**Self-Monitoring Report**  
**LLNL Mini Treatment Unit 05 (MTU05)**  
**AREA TFE-W**

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

December	<u>30</u>	<u>31</u>																	
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>				
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>					

Total monthly time facility operated (hours): 743

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-14-2010</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>19.3</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-305	393,106	8.7
W-292	267,636	6.0
Total:	<u>660,742</u>	<u>14.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>660,742</u>

6. Comments:  
NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy O. Kuhl Date: 02-01-2010

**Self-Monitoring Report**  
**LLNL Mini Treatment Unit 05 (MTU05)**  
**AREA TFE-W**

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

January	<u>30</u>	<u>31</u>														
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>					

Total monthly time facility operated (hours): 668

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-03-2010</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>20.4</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-305	348,118	8.6
W-292	239,794	5.9
Total:	<u>587,912</u>	<u>14.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>587,912</u>

6. Comments:  
NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy D. Kinkadee Date: 03-01-2010

**Self-Monitoring Report**  
**LLNL Mini Treatment Unit 05 (MTU05)**  
**AREA TFE-W**

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

February 27 28  
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 790

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-03-2010  
Influent pH: 7.5  
Effluent pH: 7.5  
Effluent Temperature (°C): 17.2

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-305	411,965	8.7
W-292	285,295	5.9
Total:	<u>697,260</u>	<u>14.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>697,260</u>

6. Comments:  
NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy O. Kilduff Date: 04-01-2010

# Self-Monitoring Report

## LLNL Vapor Extraction System 16 (VES16)

### AREA VTFE-ELM

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

December	<u>31</u>														
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1909	0	0.0	0	0	0
W-1903	0	0.0	0	0	0
W-2305	0	0.0	0	0	0
W-543-001	0	0.0	0	0	0
W-543-003	697,791	20.5	-1.05	54	718
W-543-1908	0	0.0	0	0	0
<div style="display: flex; justify-content: space-between;"> <span>Total:</span> <span><u>697,791</u></span> <span><u>20.5</u></span> </div>					

4. Comments:

As instructed by Zaf Demir, W-543-003 flow rate was increased to 20 SCFM 1/13/10. VES 16 end month hours of operation adjusted due to erroneous reporting by OPTO system. Facility operations were continuous during reporting month, therefore month end hours amended to reflect actual time facility operated from 12/30/09 to 1/29/10.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-09-2010

# Self-Monitoring Report

## LLNL Vapor Extraction System 16 (VES16)

### AREA VTFE-ELM

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

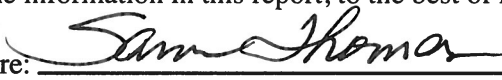
January	<u>30</u>	<u>31</u>													
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>				

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1909	0	0.0	0	0	0
W-1903	0	0.0	0	0	0
W-2305	0	0.0	0	0	0
W-543-1908	0	0.0	0	0	0
W-543-003	816,864	20.2	-1.76	45	672
W-543-001	0	0.0	0	0	0
<hr/>					
Total:	<u>816,864</u>	<u>20.2</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-01-2010



# Self-Monitoring Report

## LLNL Vapor Extraction System 16 (VES16)

### AREA VTFE-ELM

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

February 27 28  
 March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-1909	0	0.0	0	0	0
W-1903	0	0.0	0	0	0
W-2305	0	0.0	0	0	0
W-543-1908	0	0.0	0	0	0
W-543-003	984,402	20.1	-1.77	54	791
W-543-001	0	0.0	0	0	0
Total:	<u>984,402</u>	<u>20.1</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 03-31-2010

# Self-Monitoring Report

## LLNL Vapor Extraction System 12 (VES12)

### AREA VTFE-HS

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

December 31  
 January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-ETS-2010B	0	0.0	0	0	0
W-ETS-2010A	398,298	10.3	-.44	50	645
W-ETS-2009	0	0.0	0	0	0
W-ETS-2008A	404,445	10.2	-1.7	50	645
W-ETS-2008B	317,044	8.7	-9.5	50	645
W-2105	0	0.0	0	0	0
Total:	<u>1,119,787</u>	<u>29.3</u>			

4. Comments:

Facility was shutdown 1/5/10 at 13:35 hours to perform voltage and current measurements on liquid ring pump motor. Facility was restarted at 16:15 hours.  
 Facility was shutdown 1/13/10 at 15:20 hrs. due to OPTO system communication failure. Facility was restarted 1/15/10 at 14:10 hrs.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 02-01-2010

# Self-Monitoring Report

## LLNL Vapor Extraction System 12 (VES12)

### AREA VTFE-HS

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

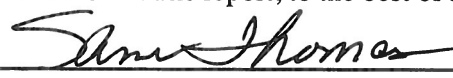
January	<u>30</u>	<u>31</u>													
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>				

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-ETS-2010B	0	0.0	0	0	0
W-ETS-2010A	417,372	10.3	-.58	50	675
W-ETS-2009	0	0.0	0	0	0
W-ETS-2008A	418,155	10.5	-2.52	50	675
W-ETS-2008B	325,771	8.2	-10.08	50	675
W-2105	0	0.0	0	0	0
<hr/>					
Total:	<u>1,161,298</u>	<u>29.0</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-01-2010

# Self-Monitoring Report

## LLNL Vapor Extraction System 12 (VES12)

### AREA VTFE-HS

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

February	<u>27</u>	<u>28</u>																								
March	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>											
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>										

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-ETS-2010B	0	0.0	0	0	0
W-ETS-2010A	493,784	10.2	-.48	49	798
W-ETS-2009	0	0.0	0	0	0
W-ETS-2008A	493,121	10.1	-2.66	49	798
W-ETS-2008B	385,315	8.2	-10.73	49	798
W-2105	0	0.0	0	0	0

Total:	<u>1,372,220</u>	<u>28.5</u>
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4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 04-15-2010

**Self-Monitoring Report**  
**LLNL GAC Treatment Unit 01 (GTU01)**  
**AREA TFG-1**

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

December 31  
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 723

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-14-2010  
Influent pH: 7.0  
Effluent pH: 7.0  
Effluent Temperature (°C): 18.7

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1111	381,377	8.8
Total:	<u>381,377</u>	<u>8.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>381,377</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 01-30-2010

**Land Observation Report date:  
TFG-ASW - Arroyo Seco**

1. Reporting Period: Business Month January Year 2010

2. Date compliance sampling performed 01-14-2010

3. Weather Conditions:

Average air tempertaure (°C):	<u>9.3</u>
6-day total precipitation (in):	<u>.49</u>
Average wind speed/direction (mph):	<u>3/ SSE</u>

4. Receiving Data:

<u>Sample</u> <u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>7.0</u>	<u>19.3</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>N/A</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 01-30-2010

**Self-Monitoring Report**  
**LLNL GAC Treatment Unit 01 (GTU01)**  
**AREA TFG-1**

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

January	<u>30</u>	<u>31</u>													
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>				

Total monthly time facility operated (hours): 665

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-16-2010</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>19.2</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1111	350,095	8.7
Total:	<u>350,095</u>	<u>8.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>350,095</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-26-2010

**Land Observation Report date:  
TFG-ASW - Arroyo Seco**

1. Reporting Period: Business Month February Year 2010

2. Date compliance sampling performed 02-16-2010

3. Weather Conditions:

Average air tempertaure (°C):	<u>11.4</u>
6-day total precipitation (in):	<u>0</u>
Average wind speed/direction (mph):	<u>2/ SE</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>N/A</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-26-2010



**Self-Monitoring Report**  
**LLNL GAC Treatment Unit 01 (GTU01)**  
**AREA TFG-1**

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

February 27 28  
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 791

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-27-2010  
Influent pH: 7.0  
Effluent pH: 7.0  
Effluent Temperature (°C): 19.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1111	417,987	8.7
Total:	<u>417,987</u>	<u>8.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>417,987</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-06-2010

**Land Observation Report date:**  
**TFG-ASW - Arroyo Seco**

1. Reporting Period: Business Month March Year 2010

2. Date compliance sampling performed 03-04-2010

3. Weather Conditions:

Average air tempertaure (°C):	<u>10</u>
6-day total precipitation (in):	<u>.67</u>
Average wind speed/direction (mph):	<u>4/ S</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>N/A</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-06-2010

**Self-Monitoring Report**  
**LLNL Mini Treatment Unit 02 (MTU02)**  
**AREA TFG-N**

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

December 31  
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 732

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-13-2010  
Influent pH: 7.5  
Effluent pH: 7.5  
Effluent Temperature (°C): 21.5

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1807	191,983	4.4
W-1806	113,406	2.5
Total:	<u>305,389</u>	<u>6.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>305,389</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 01-30-2010

**Self-Monitoring Report**  
**LLNL Mini Treatment Unit 02 (MTU02)**  
**AREA TFG-N**

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

January	<u>30</u>	<u>31</u>														
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	06	07	08	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>					

Total monthly time facility operated (hours): 566

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-16-2010</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>22.2</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1807	147,293	4.4
W-1806	87,129	2.5
Total:	<u>234,422</u>	<u>6.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>234,422</u>

6. Comments:

System was down from 2/5/10 to 2/9/10 due to flow meter and electronic repairs.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-26-2010

**Self-Monitoring Report**  
**LLNL Mini Treatment Unit 02 (MTU02)**  
**AREA TFG-N**

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

February	<u>27</u>	<u>28</u>																													
March	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>																
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>															

Total monthly time facility operated (hours): 802

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>03-04-2010</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>22.1</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1807	212,127	4.5
W-1806	125,003	2.6
Total:	<u>337,130</u>	<u>7.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>337,130</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-06-2010

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 5 (PTU5)**  
**AREA TF406**

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

December 31  
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 445

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-12-2010  
Influent pH: 7.5  
Effluent pH: 7.5  
Effluent Temperature (°C): 24

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1309	374	5.4
W-1310	410,307	15.3
GSW-445	0	0.0
Total:	<u>410,681</u>	<u>20.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>410,681</u>

6. Comments:

System down from 1/13/10 to 1/15/10 for electronic repair. System down from 1/19/10 to 1/29/10 due to drilling activities nearby.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 01-29-2010

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 5 (PTU5)**  
**AREA TF406**

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

January 30 31  
February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26

Total monthly time facility operated (hours): 442

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-11-2010  
Influent pH: 7.0  
Effluent pH: 7.0  
Effluent Temperature (°C): 22.3

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1309	0	0.0
W-1310	399,652	15.5
GSW-445	0	0.0
Total:	<u>399,652</u>	<u>15.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>399,652</u>

6. Comments:

System down from 2/16/10 to 2/26/10 due to drilling activities nearby.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-26-2010

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 5 (PTU5)**  
**AREA TF406**

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

February 27 28  
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 788

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-03-2010  
Influent pH: 7.0  
Effluent pH: 7.0  
Effluent Temperature (°C): 22.5

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1309	0	0.0
W-1310	744,863	15.7
GSW-445	0	0.0
Total:	<u>744,863</u>	<u>15.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>744,863</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-06-2010



**Self-Monitoring Report**  
**LLNL GAC Treatment Unit 03 (GTU03)**  
**AREA TF406-NW**

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

December 31  
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 720

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-12-2010  
Influent pH: 7.5  
Effluent pH: 7.5  
Effluent Temperature (°C): 22

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1801	208,715	4.8
Total:	<u>208,715</u>	<u>4.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>208,715</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-01-2010

**Self-Monitoring Report**  
**LLNL GAC Treatment Unit 03 (GTU03)**  
**AREA TF406-NW**

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

January 30 31  
February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26

Total monthly time facility operated (hours): 667

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-11-2010  
Influent pH: 7.5  
Effluent pH: 7.5  
Effluent Temperature (°C): 21.6

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1801	186,206	4.6
Total:	<u>186,206</u>	<u>4.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>186,206</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-26-2010

**Self-Monitoring Report**  
**LLNL GAC Treatment Unit 03 (GTU03)**  
**AREA TF406-NW**

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

February	<u>27</u>	<u>28</u>																								
March	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	14	<u>15</u>											
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	23	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>										

Total monthly time facility operated (hours): 694

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>03-08-2010</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>21.4</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1801	197,908	4.4
Total:	<u>197,908</u>	<u>4.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>197,908</u>

6. Comments:

System down from 3/13/10 to 3/15/10 due to "flow meter failure" alarm. System down from 3/22/10 to 3/24/10 due to power failure. 3/18/10 394 Gal. of water from VTF518PZ processed through facility.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-27-2010

**Self-Monitoring Report**  
**LLNL Solar Treatment Unit 09 (STU09)**  
**AREA TF518-N**

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

December	30	31													
January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28		

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
<b>W-1410</b>	<b>0</b>	<b>0.0</b>
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 2-20-08 due to elevated tritium activities in the facility influent. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Shirley Kawaguchi Date: 01-28-2010

**Self-Monitoring Report**  
**LLNL Solar Treatment Unit 09 (STU09)**  
**AREA TF518-N**

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

January	29	30	31												
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26				

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1410	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 2-20-08 due to elevated tritium activities in the facility influent. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Scott Karganuli Date: 02-28-2010

**Self-Monitoring Report**  
**LLNL Solar Treatment Unit 09 (STU09)**  
**AREA TF518-N**

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

February	27	28																	
March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15				
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1410	0	
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 2-20-08 due to elevated tritium activities in the facility influent. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-03-2010

**Self-Monitoring Report**  
**LLNL Treatment Facility 518-HDTANK (TF518-HDTANK)**  
**AREA TF518-PZ**

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

December 31  
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 721

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1615	197	0.0
W-518-1913	0	0.0
W-518-1915	64	0.0
W-518-1914	0	0.0
SVB-518-201	0	0.0
SVB-518-204	0	0.0
Total:	<u>261</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>260.9</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thoma Date: 02-01-2010

**Self-Monitoring Report**  
**LLNL Treatment Facility 518-HDTANK (TF518-HDTANK)**  
**AREA TF518-PZ**

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

January	<u>30</u>	<u>31</u>															
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>		
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>						

Total monthly time facility operated (hours): 670

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1615	109	0.0
W-518-1913	0	0.0
W-518-1914	0	0.0
W-518-1915	95	0.0
SVB-518-201	0	0.0
SVB-518-204	0	0.0
Total:	<u>204</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>204.2</u>

6. Comments:

Compliance sampling is not required because water is treated at TF406 Northwest (GTU03).

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 03-01-2010



**Self-Monitoring Report**  
**LLNL Treatment Facility 518-HDTANK (TF518-HDTANK)**  
**AREA TF518-PZ**

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

February	<u>27</u>	<u>28</u>																													
March	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>																
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>															

Total monthly time facility operated (hours): 790

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1615	199	0.0
W-518-1913	0	0.0
W-518-1914	0	0.0
W-518-1915	144	0.0
SVB-518-201	0	0.0
SVB-518-204	0	0.0
Total:	<u>343</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>343.1</u>

6. Comments:

Transferred 396 gallons of groundwater for treatment at TF406-NW 3/18/10.  
Compliance sampling is not required because water is treated at TF406 Northwest (GTU03).

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 03-31-2010

**Self-Monitoring Report**  
**LLNL Catalytic Reductive Dehalogenation 1 (CRD1)**  
**AREA TF5475-1**

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

December 31  
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1302-2	0	0.0
Total:	<u>0</u>	<u>0.0</u>

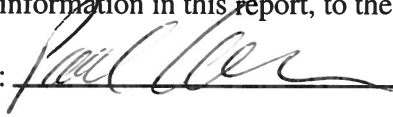
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-1 injection</u>	<u>W-1302-1</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 7/27/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-01-2010

**Self-Monitoring Report**  
**LLNL Catalytic Reductive Dehalogenation 1 (CRD1)**  
**AREA TF5475-1**

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

January	30	31													
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26				

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1302-2	<b>0</b>	<b>0.0</b>
Total:	<u><b>0</b></u>	<u><b>0.0</b></u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-1 injection</u>	<u>W-1302-1</u>	<u><b>0</b></u>

6. Comments:

This treatment facility was shut down on 7/27/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-26-2010

**Self-Monitoring Report**  
**LLNL Catalytic Reductive Dehalogenation 1 (CRD1)**  
**AREA TF5475-1**

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

February	27	28																										
March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15													
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31												

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1302-2	0	0.0
Total:	<u>0</u>	<u>0.0</u>

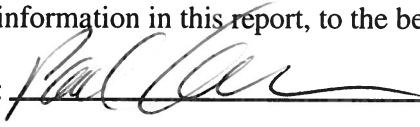
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-1 injection</u>	<u>W-1302-1</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 7/27/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-06-2010

**Self-Monitoring Report**  
**LLNL GAC Treatment Unit 09 (GTU09)**  
**AREA TF5475-2**

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

December 31  
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 720

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-06-2010  
Influent pH: 6.5  
Effluent pH: 7.5  
Effluent Temperature (°C): 20.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1108	193,590	4.5
W-1415	294	0.8
Total:	<u>193,884</u>	<u>5.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>193,884</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Mat VanNoy Date: 01-30-2010

**Self-Monitoring Report**  
**LLNL GAC Treatment Unit 09 (GTU09)**  
**AREA TF5475-2**

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

January	30	31																	
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>				
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>								

Total monthly time facility operated (hours): 624

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-02-2010</u>
Influent pH:	<u>6.5</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>16</u>

4. Wellfield Data:


<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1108	168,480	4.5
W-1415	0	0.0
Total:	<u>168,480</u>	<u>4.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>168,480</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-05-2010

**Self-Monitoring Report**  
**LLNL GAC Treatment Unit 09 (GTU09)**  
**AREA TF5475-2**

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

February 27 28  
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 412

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-03-2010  
Influent pH: 7.0  
Effluent pH: 7.0  
Effluent Temperature (°C): 16.5

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1108	109,445	4.5
W-1415	0	0.0
Total:	<u>109,445</u>	<u>4.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>109,445</u>

6. Comments:

Facility was secured on 3-15-10 due to construction in the area limiting facility access.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-05-2010

**Self-Monitoring Report**  
**LLNL Catalytic Reductive Dehalogenation 2 (CRD2)**  
**AREA TF5475-3**

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

December	31														
January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
<b>W-1608</b>	<b>0</b>	<b>0.0</b>
<b>W-1605</b>	<b>0</b>	<b>0.0</b>
<b>W-1604</b>	<b>0</b>	<b>0.0</b>
<b>W-1609</b>	<b>0</b>	<b>0.0</b>
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u><b>CRD-2 injection</b></u>	<u><b>W-1610</b></u>	<u><b>0</b></u>

6. Comments:

This treatment facility was shut down on 8/31/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-01-2010



**Self-Monitoring Report**  
**LLNL Catalytic Reductive Dehalogenation 2 (CRD2)**  
**AREA TF5475-3**

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

January	30	31													
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26				

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1605	0	0.0
W-1604	0	0.0
W-1609	0	0.0
W-1608	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-2 injection</u>	<u>W-1610</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 8/31/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-26-2010

**Self-Monitoring Report**  
**LLNL Catalytic Reductive Dehalogenation 2 (CRD2)**  
**AREA TF5475-3**

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treated ground water was discharged

February	27	28																	
March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15				
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1605	0	0.0
W-1604	0	0.0
W-1609	0	0.0
W-1608	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-2 injection</u>	<u>W-1610</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 8/31/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-06-2010

# Self-Monitoring Report

## LLNL Vapor Extraction System 08 (VES08)

### AREA VTF406-HS

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

December	<u><b>31</b></u>														
January	<u><b>01</b></u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u><b>16</b></u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-217	873,166	19.9	-2.5	62.6	724
W-514-2007B	402,666	10.2	-2.93	62.6	724
W-514-2007A	208,653	5.1	-4.92	62.6	724
Total:					
	<u><b>1,484,485</b></u>	<u><b>35.1</b></u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **02-01-2010**

# Self-Monitoring Report

## LLNL Vapor Extraction System 08 (VES08)

### AREA VTF406-HS

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

January	<u><b>30</b></u>	<u><b>31</b></u>														
February	<u><b>01</b></u>	<u><b>02</b></u>	<u><b>03</b></u>	<u><b>04</b></u>	<u><b>05</b></u>	<u><b>06</b></u>	<u><b>07</b></u>	<u><b>08</b></u>	<u><b>09</b></u>	<u><b>10</b></u>	<u><b>11</b></u>	<u><b>12</b></u>	<u><b>13</b></u>	<u><b>14</b></u>	<u><b>15</b></u>	
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>					

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-217	793,019	19.4	-2.28	63.5	677
W-514-2007A	182,896	4.4	-4.77	63.5	677
W-514-2007B	359,992	9.7	-2.62	63.5	677
Total:	<u>1,335,907</u>	<u>33.4</u>			

4. Comments:

Quarterly vapor samples collected from SVE wells 2/16/10 and submitted to Caltest Labs.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-01-2010

# Self-Monitoring Report

## LLNL Vapor Extraction System 08 (VES08)

### AREA VTF406-HS

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

February	<u>27</u>	28																								
March	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>											
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>										

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-217	832,757	19.6	-2.43	62.6	731
W-514-2007A	173,772	2.4	-4.74	62.6	731
W-514-2007B	431,269	10.5	-2.76	62.6	731
Total:					
	<u>1,437,798</u>	<u>32.5</u>			

4. Comments:

Found facility shutdown due to low vapor flow interlock. Shutdown occurred 2/27/10 @ 0935 hrs. Facility was restarted 3/1/10 @ 09:50 hrs. Facility shutdown due to scheduled power outage 3/14/10. Facility was restarted 3/15/10 @ 08:30 hrs.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: \_\_\_\_\_

*Sam Thomas*

Date: 04-20-2010

# Self-Monitoring Report

## LLNL Vapor Extraction System 14 (VES14)

### AREA VTF511

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

December 31  
 January 01 02 03 04 05 06 07 08 09 10 11 **12** 13 14 15  
           16 17 18 19 20 21 22 23 24 25 26 27 28 29

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-274	0	0.0	0	0	0
W-2206	0	0.0	0	0	0
W-2207A	0	0.0	0	0	0
W-2204	0	0.0	0	0	0
W-2208B	249	0.0	0	0	1
W-1517	0	0.0	0	0	0
W-2207B	184	0.0	0	0	1
W-2208A	0	0.0	0	0	0
W-2205	0	0.0	0	0	0
Total:	<u>433</u>	<u>0.0</u>			

4. Comments:

1/29/09-Removed failed Airtech vacuum pump and installed reconditioned McKenna liquid ring vacuum pump. Facility was started 1/12/10 @ 11:35 and was found shutdown at 12:30 due to vacuum pump motor overload.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **02-01-2010**

# Self-Monitoring Report

## LLNL Vapor Extraction System 05 (VES05)

### AREA VTF511

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

January    01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
                  16 17 18 19 20 21 22 23 24 25 26 **27** **28** **29**

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-2204	0	0.0	0	0	0
W-2205	0	0.0	0	0	0
W-2206	0	0.0	0	0	0
W-2207A	0	0.0	0	0	0
W-2207B	12,782	3.8	-6.6	60	48
W-2208A	0	0.0	0	0	0
W-2208B	14,945	3.9	-2.8	60	48
W-1517	0	0.0	0	0	0
W-274	0	0.0	0	0	0
Total:	<u>27,727</u>	<u>7.7</u>			

4. Comments:

VES 05 SVE system activated 1/27/10 at VTF-511.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-03-2010

# Self-Monitoring Report

## LLNL Vapor Extraction System 05 (VES05)

### AREA VTF511

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

January 30 31  
 February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
                   16 17 18 19 20 21 22 23 24 25 26

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-274	0	0.0	0	0	0
W-2208A	0	0.0	0	0	0
W-2207A	0	0.0	0	0	0
W-2207B	120,923	7.0	-5.5	62	271
W-1517	0	0.0	0	0	0
W-2208B	103,895	6.1	-3.5	62	271
W-2204	0	0.0	0	0	0
W-2206	0	0.0	0	0	0
W-2205	0	0.0	0	0	0
Total:	<u>224,818</u>	<u>13.1</u>			

4. Comments:

VES05 was shutdown 2/9/10 to increase blower output frequency and evaluate system performance. Unit vacuum motor was replaced 2/10, system restarted and was shutdown to troubleshoot Toshiba Inverter. VES05 was restarted 2/11/10 following adjustment of Yokogawa inlet pressure controller @ 0900 hrs. Facility was discovered shutdown @ 09:45 hrs on high discharge temp alarm. Facility was restarted @ 13:35, and was shutdown for carbon filter replacement. Facility was restarted 2/18/10 @ 13:18 hrs. test extraction well instrumentation. Facility was shutdown @ 15:00 hours.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-01-2010



# Self-Monitoring Report

## LLNL Vapor Extraction System 05 (VES05)

### AREA VTF511

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

February	27	28																								
March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15											
	16	<b><u>17</u></b>	18	<b><u>19</u></b>	20	21	22	23	24	<b><u>25</u></b>	<b><u>26</u></b>	27	28	29	30	31										

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-274	0	0.0	0	0	0
W-2208A	0	0.0	0	0	0
W-2207A	0	0.0	0	0	0
W-2207B	3,234	4.6	-6	76	10
W-2206	0	0.0	0	0	0
W-2208B	4,483	4.5	-2.5	76	10
W-2204	0	0.0	0	0	0
W-1517	0	0.0	0	0	0
W-2205	0	0.0	0	0	0
<hr/>					
Total:	<b><u>7,717</u></b>	<b><u>9.1</u></b>			

4. Comments:

Facility operated on dates indicated above to evaluate performance of VES05 variable frequency drive and test/verify accuracy of extraction well differential pressure transducers.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **03-31-2010**

**Self-Monitoring Report**  
**LLNL Vapor Extraction System 19 (VES19)**  
**AREA VTF518-PZ**

1. Reporting Period: Business Month January Week: 1 Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

December 31  
January 01 02 03 04 05 06 07

3. Wellfield Data:

<u>Source</u>	<u>Weekly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-1615	46,128	4.0	-12	55	192
W-518-1913	0	0.0	0	0	0
W-518-1915	5,766	0.5	-23.8	55	192
W-518-1914	0	0.0	0	0	0
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>51,894</u>	<u>4.5</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 01-19-2010

**Self-Monitoring Report**  
**LLNL Vapor Extraction System 19 (VES19)**  
**AREA VTF518-PZ**

1. Reporting Period: Business Month January Week: 2 Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

January    **08** **09** **10** **11** **12** **13** **14** **15**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
<b>W-1615</b>	<b>44,951</b>	<b>3.9</b>	<b>-12</b>	<b>50</b>	<b>192</b>
<b>W-518-1913</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>W-518-1915</b>	<b>5,763</b>	<b>0.5</b>	<b>-23.5</b>	<b>50</b>	<b>192</b>
<b>W-518-1914</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>SVB-518-201</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>SVB-518-204</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Total:	<u><b>50,714</b></u>	<u><b>4.4</b></u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: *Sam Thomas* Date: **01-19-2010**

**Self-Monitoring Report**  
**LLNL Vapor Extraction System 19 (VES19)**  
**AREA VTF518-PZ**

1. Reporting Period: Business Month January Week: 3 Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

January **16** **17** **18** **19** **20** **21** **22**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
<b>W-1615</b>	<b>36,288</b>	<b>3.6</b>	<b>-12.6</b>	<b>50</b>	<b>168</b>
<b>W-518-1913</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>W-518-1915</b>	<b>4,032</b>	<b>0.4</b>	<b>-23.4</b>	<b>50</b>	<b>168</b>
<b>W-518-1914</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>SVB-518-201</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>SVB-518-204</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Total:	<u><b>40,320</b></u>	<u><b>4.0</b></u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **02-01-2010**

**Self-Monitoring Report**  
**LLNL Vapor Extraction System 19 (VES19)**  
**AREA VTF518-PZ**

1. Reporting Period: Business Month January Week: 4 Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

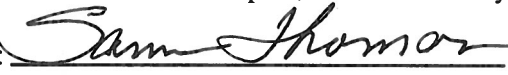
January **23** **24** **25** **26** **27** **28** **29**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
<b>W-1615</b>	<b>39,616</b>	<b>3.9</b>	<b>-11.5</b>	<b>56</b>	<b>169</b>
<b>W-518-1913</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>W-518-1915</b>	<b>5,079</b>	<b>0.5</b>	<b>-23.8</b>	<b>56</b>	<b>169</b>
<b>W-518-1914</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>SVB-518-201</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>SVB-518-204</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Total:	<u><b>44,695</b></u>	<u><b>4.4</b></u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **02-01-2010**

**Self-Monitoring Report**  
**LLNL Vapor Extraction System 19 (VES19)**  
**AREA VTF518-PZ**

1. Reporting Period: Business Month February Week: 1 Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

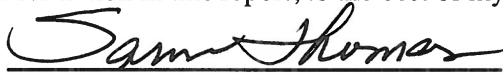
January     **30** **31**  
February   **01** **02** **03** **04** **05**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
<b>W-1615</b>	<b>38,610</b>	<b>3.9</b>	<b>-12</b>	<b>45</b>	<b>165</b>
<b>W-518-1913</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>W-518-1914</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>W-518-1915</b>	<b>3,960</b>	<b>0.4</b>	<b>-23</b>	<b>45</b>	<b>165</b>
<b>SVB-518-201</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>SVB-518-204</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total:</b>	<b><u>42,570</u></b>	<b><u>4.3</u></b>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **02-23-2010**

**Self-Monitoring Report**  
**LLNL Vapor Extraction System 19 (VES19)**  
**AREA VTF518-PZ**

1. Reporting Period: Business Month February Week: 2 Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

February **06** **07** **08** **09** **10** **11** **12**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
<b>W-1615</b>	<b>37,829</b>	<b>3.7</b>	<b>-13</b>	<b>62</b>	<b>170</b>
<b>W-518-1913</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>W-518-1914</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>W-518-1915</b>	<b>5,112</b>	<b>0.5</b>	<b>-23.8</b>	<b>62</b>	<b>170</b>
<b>SVB-518-201</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>SVB-518-204</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Total:	<u><b>42,941</b></u>	<u><b>4.2</b></u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: *Sam Thomas* Date: **02-23-2010**

**Self-Monitoring Report**  
**LLNL Vapor Extraction System 19 (VES19)**  
**AREA VTF518-PZ**

1. Reporting Period: Business Month February Week: 3 Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

February **13** **14** **15** **16** **17** **18** **19**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	35,878	3.6	-15.3	49	166
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	3,986	0.4	-23.4	49	166
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>39,864</u>	<u>4.0</u>			

4. Comments:

Collected groundwater samples from W-518-1914 and W-518-1913 2/16/10.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-23-2010



**Self-Monitoring Report**  
**LLNL Vapor Extraction System 19 (VES19)**  
**AREA VTF518-PZ**

1. Reporting Period: Business Month February Week: 4 Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

February **20** **21** **22** **23** **24** **25** **26**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
<b>W-1615</b>	<b>37,407</b>	<b>3.7</b>	<b>-14.8</b>	<b>58</b>	<b>168</b>
<b>W-518-1913</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>168</b>
<b>W-518-1914</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>168</b>
<b>W-518-1915</b>	<b>5,055</b>	<b>0.5</b>	<b>-23</b>	<b>58</b>	<b>168</b>
<b>SVB-518-201</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>168</b>
<b>SVB-518-204</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>168</b>
Total:	<u><b>42,462</b></u>	<u><b>4.2</b></u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: *Sam Thomas* Date: **03-01-2010**

**Self-Monitoring Report**  
**LLNL Vapor Extraction System 19 (VES19)**  
**AREA VTF518-PZ**

1. Reporting Period: Business Month March Week: **1** Year **2010**

2. Dates (in **bold** and underline ) treatment facility operated

February 27 28  
March 01 02 03 04 05

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	40,440	4.0	-14.3	50	168
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	4,044	0.4	-23.5	50	168
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>44,484</u>	<u>4.4</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 03-08-2010

**Self-Monitoring Report**  
**LLNL Vapor Extraction System 19 (VES19)**  
**AREA VTF518-PZ**

1. Reporting Period: Business Month March Week: 2 Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

March      **06** **07** **08** **09** **10** **11** **12**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	38,258	3.8	-14	52	168
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	4,027	0.4	-23.5	52	168
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>42,285</u>	<u>4.2</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: *Sam Thomas* Date: 03-22-2010

**Self-Monitoring Report**  
**LLNL Vapor Extraction System 19 (VES19)**  
**AREA VTF518-PZ**

1. Reporting Period: Business Month March Week: 3 Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

March     **13** **14** **15** **16** **17** **18** **19**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	39,265	3.9	-13	68	168
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	5,034	0.5	-23	68	168
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>44,299</u>	<u>4.4</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 03-22-2010

**Self-Monitoring Report**  
**LLNL Vapor Extraction System 19 (VES19)**  
**AREA VTF518-PZ**

1. Reporting Period: Business Month March Week: **4** Year **2010**

2. Dates (in **bold** and underline ) treatment facility operated

March      **20** **21** **22** **23** **24** **25** **26**

3. Wellfield Data:

<u>Source</u>	<u>Weekly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
<b>W-1615</b>	<b>38,578</b>	<b>3.8</b>	<b>-13.5</b>	<b>66</b>	<b>169</b>
<b>W-518-1913</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>W-518-1914</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>W-518-1915</b>	<b>4,061</b>	<b>0.4</b>	<b>-23.5</b>	<b>66</b>	<b>169</b>
<b>SVB-518-201</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>SVB-518-204</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total:</b>	<b><u>42,639</u></b>	<b><u>4.2</u></b>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: **03-29-2010**

# Self-Monitoring Report

## LLNL Vapor Extraction System 01 (VES01)

### AREA VTF5475

1. Reporting Period: Business Month January Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

December	30	31													
January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28		

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-ETS-507	0	0.0	0	0	0
W-1608	0	0.0	0	0	0
W-1605	0	0.0	0	0	0
W-2211	0	0.0	0	0	0
W-2302	0	0.0	0	0	0
W-2303	0	0.0	0	0	0
W-2212	0	0.0	0	0	0
SVI-ETS-504	0	0.0	0	0	0
<hr/>					
Total:	<u>0</u>	<u>0.0</u>			

4. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>VTF5475 Vapor Injection Well</u>	<u>SVI-ETS-505</u>	<u>0</u>

5. Comments:

This treatment facility was shut down on 10-12-07 due to a FY 2008 funding reduction. The facility will be restarted once a solution for mixed waste generation is implemented.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 01-28-2010

# Self-Monitoring Report

## LLNL Vapor Extraction System 01 (VES01)

### AREA VTF5475

1. Reporting Period: Business Month February Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

January	29	30	31												
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26				

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-ETS-507	0	0.0	0	0	0
W-1608	0	0.0	0	0	0
W-1605	0	0.0	0	0	0
W-2211	0	0.0	0	0	0
W-2303	0	0.0	0	0	0
W-2212	0	0.0	0	0	0
W-2302	0	0.0	0	0	0
SVI-ETS-504	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>VTF5475 Vapor Injection Well</u>	<u>SVI-ETS-505</u>	<u>0</u>

5. Comments:

This treatment facility was shut down on 10-12-07 due to a FY 2008 funding reduction. The facility will be restarted once a solution for mixed waste generation is implemented.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-28-2010

# Self-Monitoring Report

## LLNL Vapor Extraction System 01 (VES01)

### AREA VTF5475

1. Reporting Period: Business Month March Year 2010

2. Dates (in **bold** and underline ) treatment facility operated

February	27	28																								
March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15											
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31										

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-ETS-507	0	0.0	0	0	0
W-1608	0	0.0	0	0	0
W-1605	0	0.0	0	0	0
W-2211	0	0.0	0	0	0
W-2303	0	0.0	0	0	0
W-2212	0	0.0	0	0	0
W-2302	0	0.0	0	0	0
SVI-ETS-504	0	0.0	0	0	0
<hr/>					
Total:	<u>0</u>	<u>0.0</u>			

4. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>VTF5475 Vapor Injection Well</u>	<u>SVI-ETS-505</u>	<u>0</u>

5. Comments:

This treatment facility was shut down on 10-12-07 due to a FY 2008 funding reduction. The facility will be restarted once a solution for mixed waste generation is implemented.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-03-2010



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## **Attachment C**

### **Lake Haussmann**

## Attachment C

### Lake Haussmann First Quarter 2010 Monitoring Program Summary

This attachment summarizes sampling requirements for LLNL Environmental Protection Department for discharge from Lake Haussmann. No sampling was required during first quarter, 2010. Sampling will resume in June for the dry season. Lake Haussmann is an engineered water body that has a 37 acre-ft capacity. It is located in the central portion of the Livermore Site (Fig. C-1) and receives storm water runoff and treated ground water discharges.

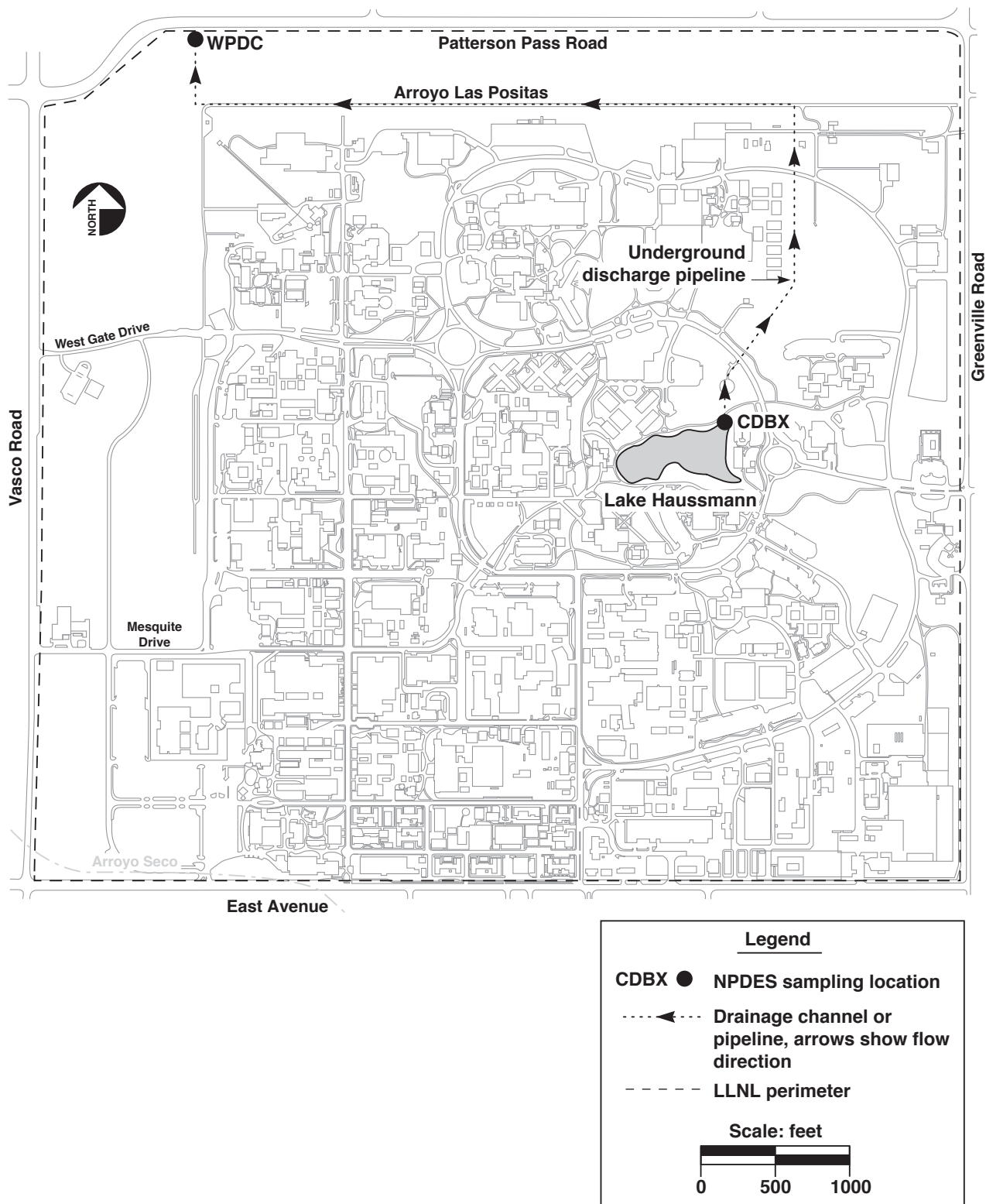
Samples are collected from water discharged from Lake Haussmann and analyzed as outlined in Jackson (2002). The discharge samples are used to determine compliance with discharge limits in the *Record of Decision* (DOE, 1992), and the subsequent *Explanation of Significant Differences for Metals Discharge Limits* (Berg et al., 1997).

Dry season (June, July, August, September) discharges are sampled at each manual release or monthly during periods of continual release. Wet season (October through May) discharge samples are collected at the first release of the wet season and one other discharge in conjunction with a storm water monitoring event. Analytic results of discharge samples collected at location CDBX are compared with the LLNL Arroyo Las Positas outfall sample results collected at location WPDC (Fig. C-1). There are no analytical results for locations CDBX and WPDC because no sampling was required during first quarter, 2010.

Discharge from Lake Haussmann remained continuous during the first quarter. Lake Haussmann's upper weir gate was maintained at the lowered position during the entire first quarter so that releases occurred continuously to minimize changes in surface water level and allow for a more natural ecosystem.

### References

- U.S. Department of Energy, *Record of Decision for the Lawrence Livermore National Laboratory, Livermore Site*, Lawrence Livermore National Laboratory, Livermore, CA, UCRL-AR-109105, (1992).
- Berg, L.L., E.N. Folsom, M.D. Dresen, R.W. Bainer, and A.L. Lamarre, Eds., *Explanation of Significant Differences for Metals Discharge Limits at the Lawrence Livermore National Laboratory, Livermore Site*, Lawrence Livermore National Laboratory, Livermore, CA, UCRL-AR-125927 (1997).
- Jackson, C.S., *Drainage Retention Basin Monitoring Plan Change*, Letter to Ms. Naomi Feger, San Francisco Bay RWQCB, Lawrence Livermore National Laboratory, Livermore, CA, WGMG02:175:CSJ:RW:kh, (December 6, 2002)



ERD-S3R-08-0041

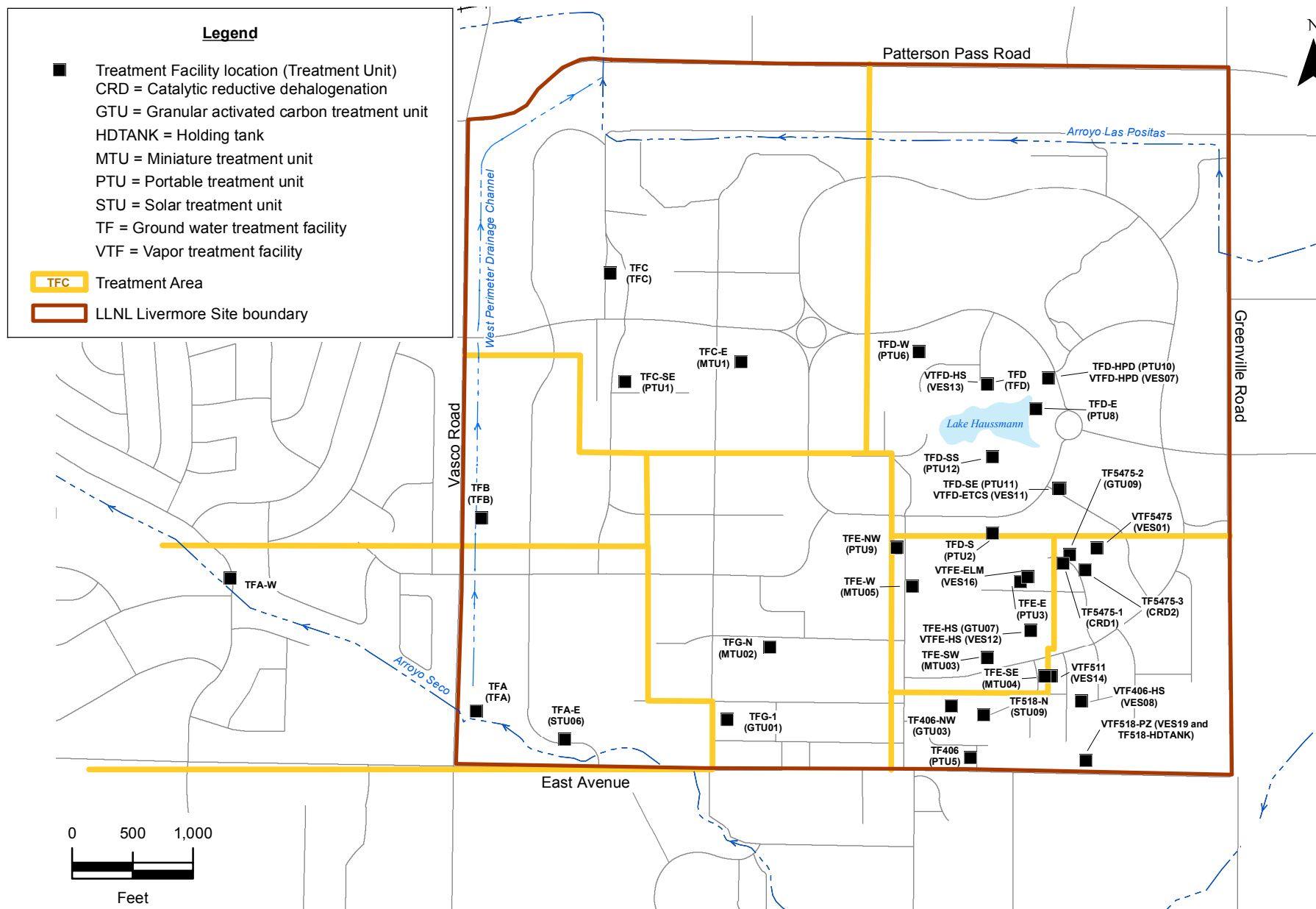
**Figure C-1. Location of Lake Haussmann showing discharge sampling locations.**

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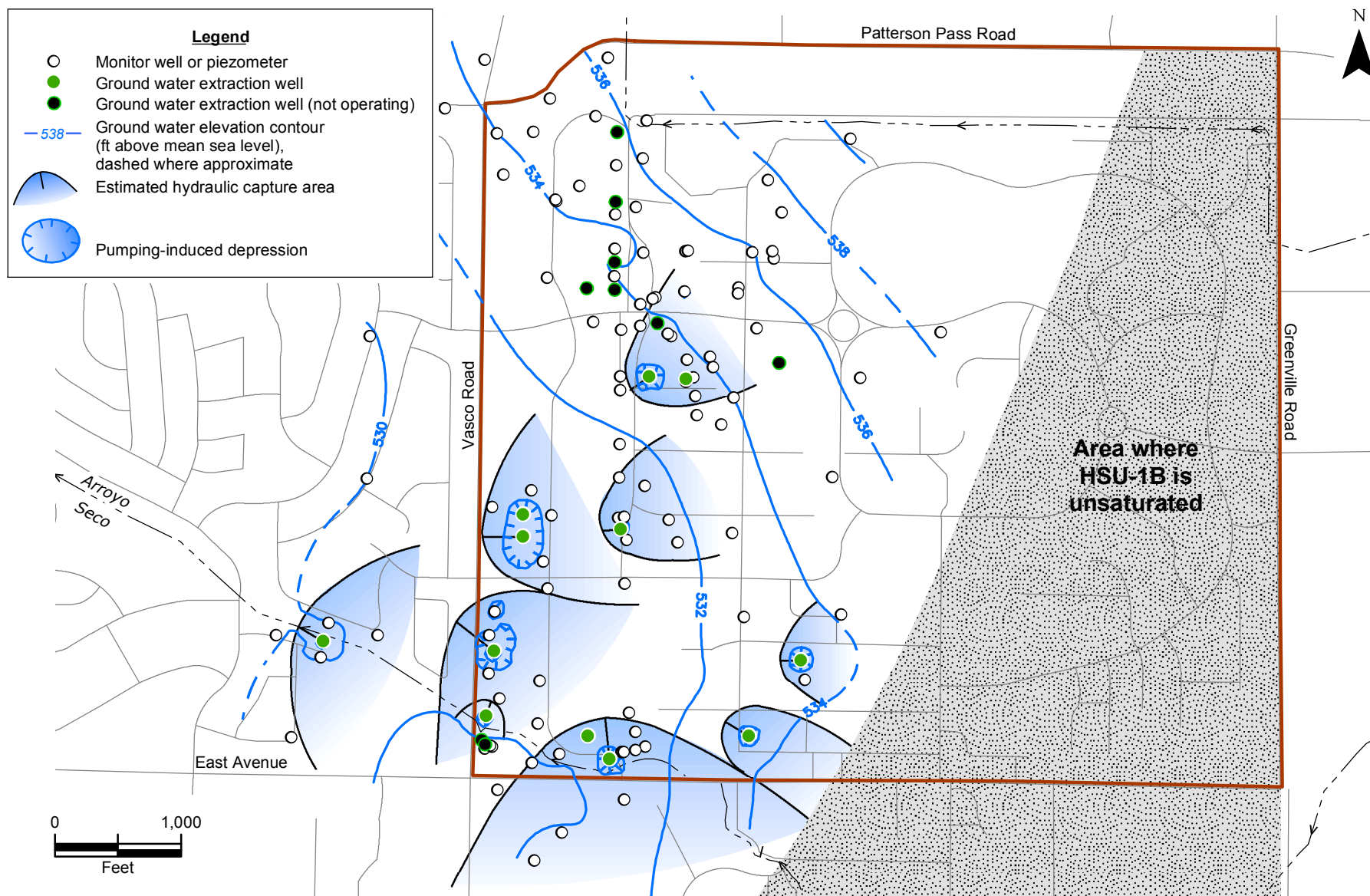
## **Attachment D**

### **Figures**

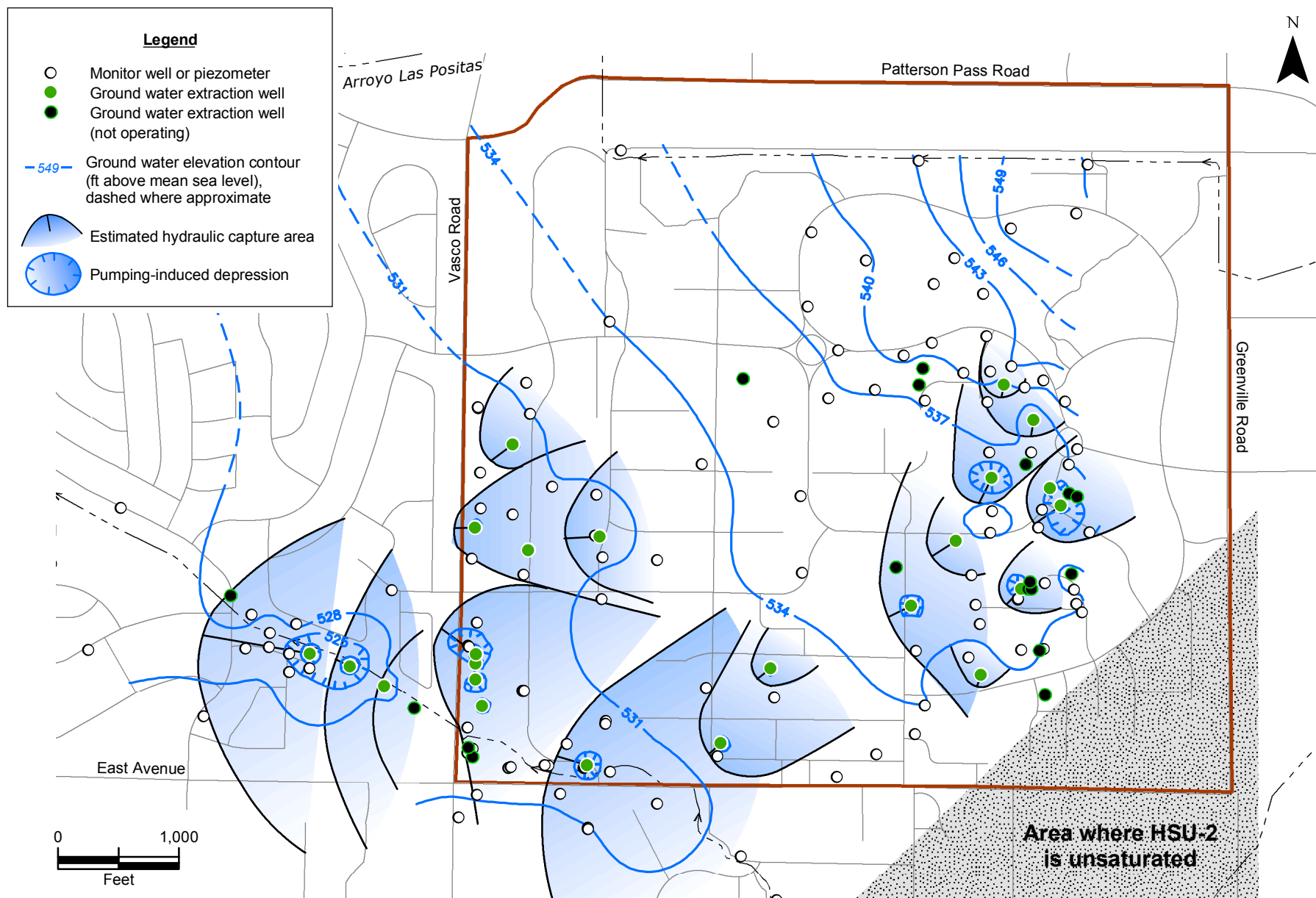
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**Figure 1. Livermore Site treatment areas and treatment facility locations.**



**Figure 2. Ground water elevation contour map based on 125 wells completed within HSU-1B showing estimated hydraulic capture areas, LLNL and vicinity, January 2010.**



**Figure 3. Ground water elevation contour map based on 161 wells completed within HSU-2 showing estimated hydraulic capture areas, LLNL and vicinity, January 2010.**

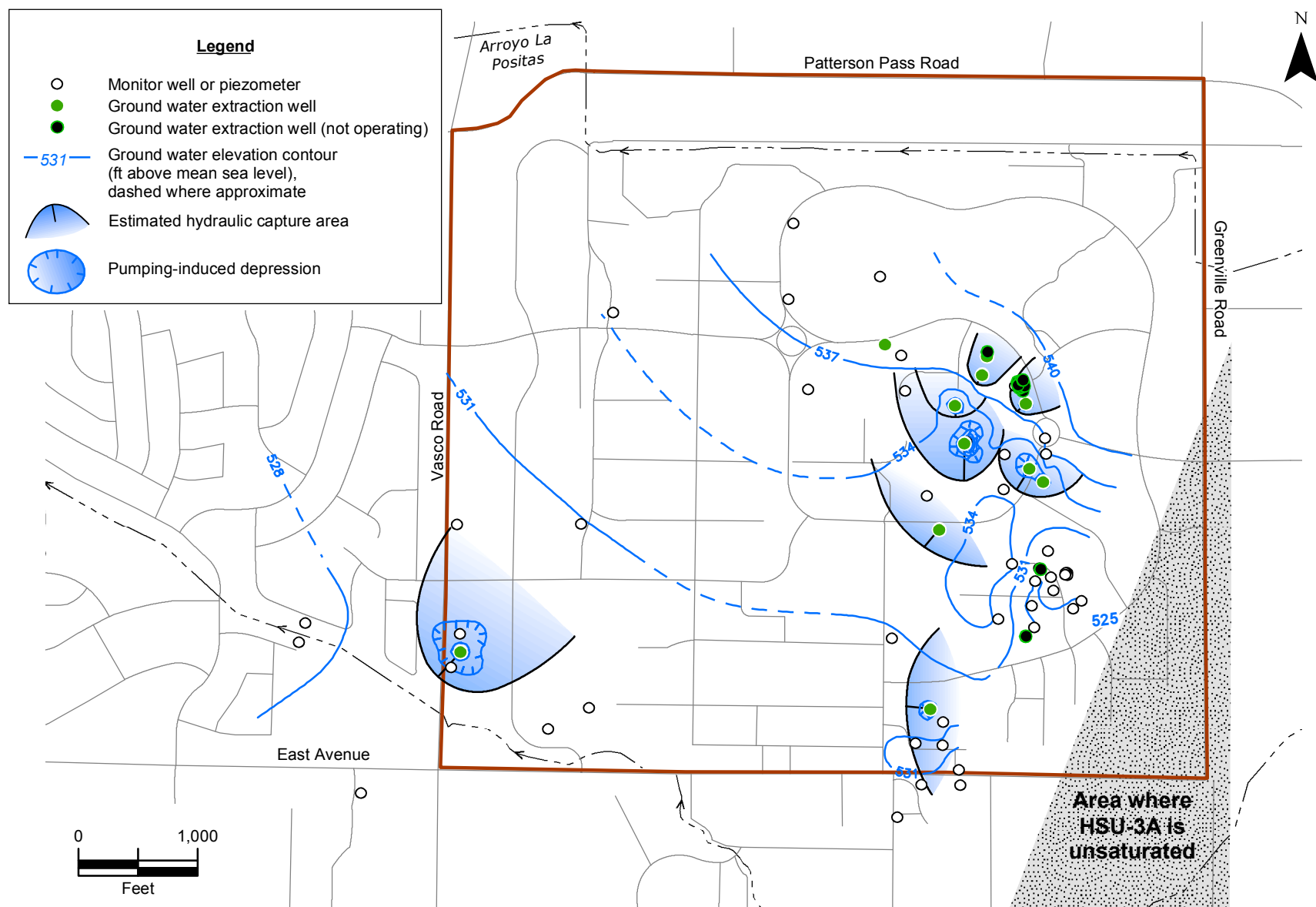
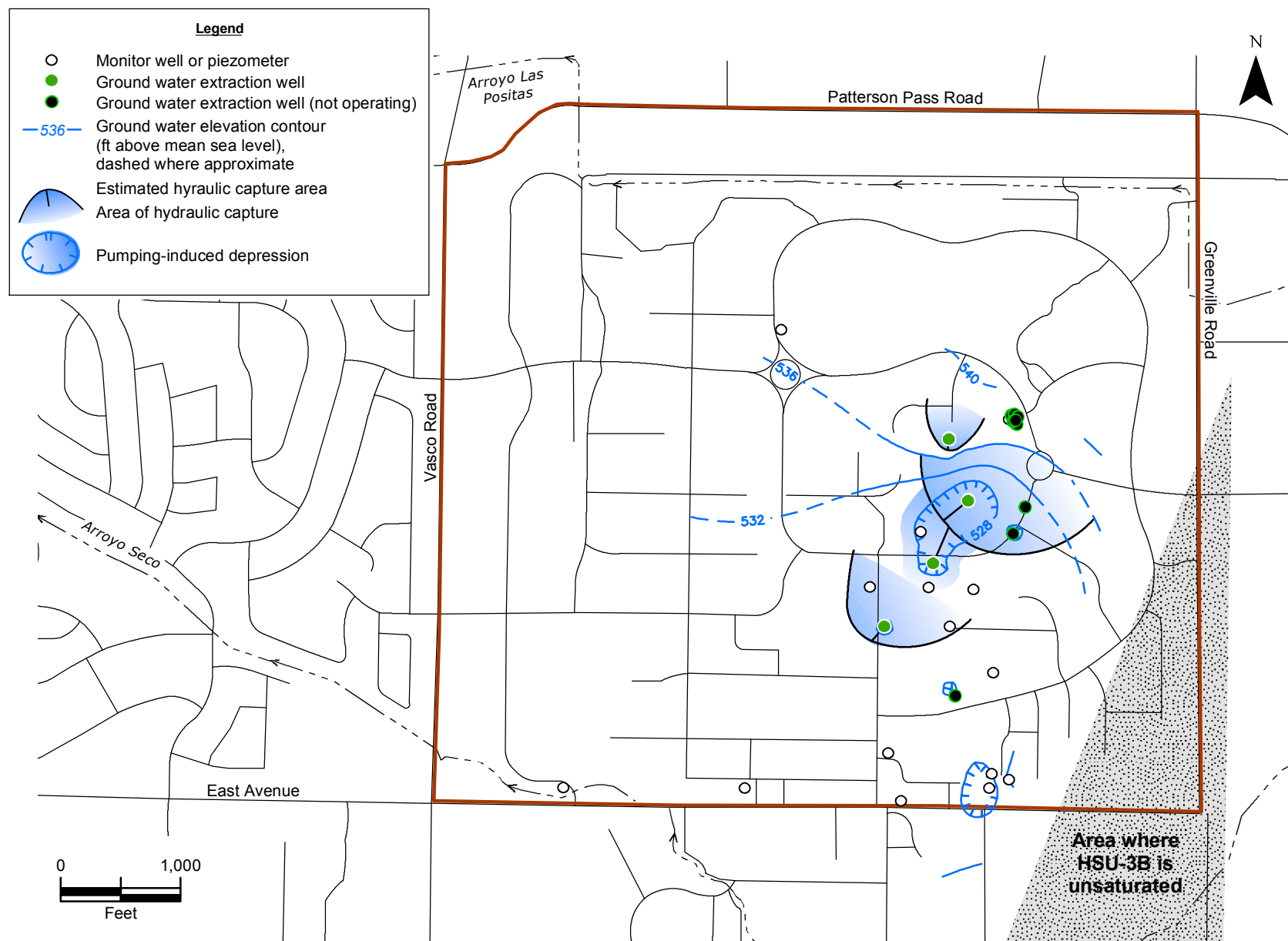
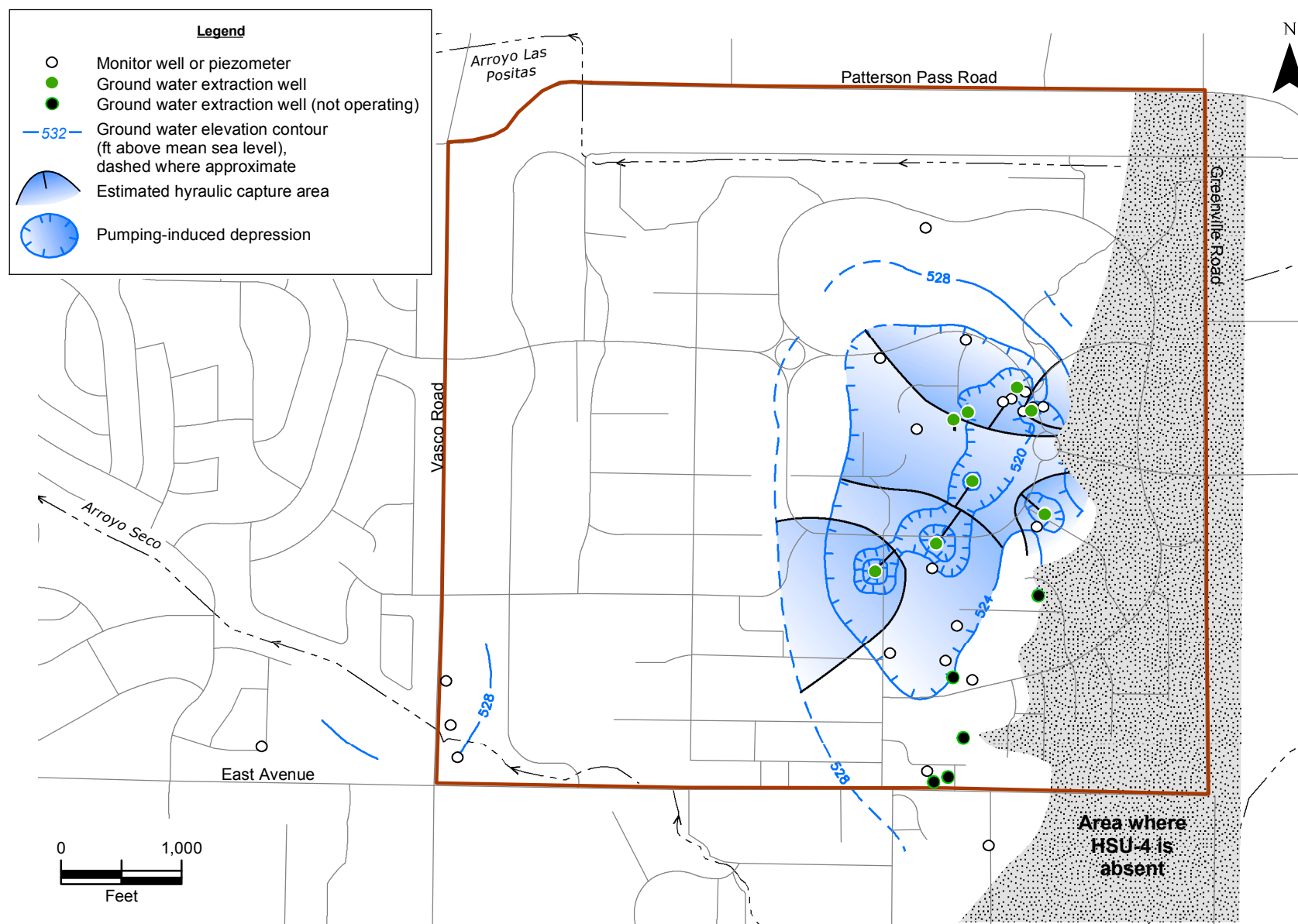


Figure 4. Ground water elevation contour map based on 71 wells completed within HSU-3A showing estimated hydraulic capture areas, LLNL and vicinity, January 2010.

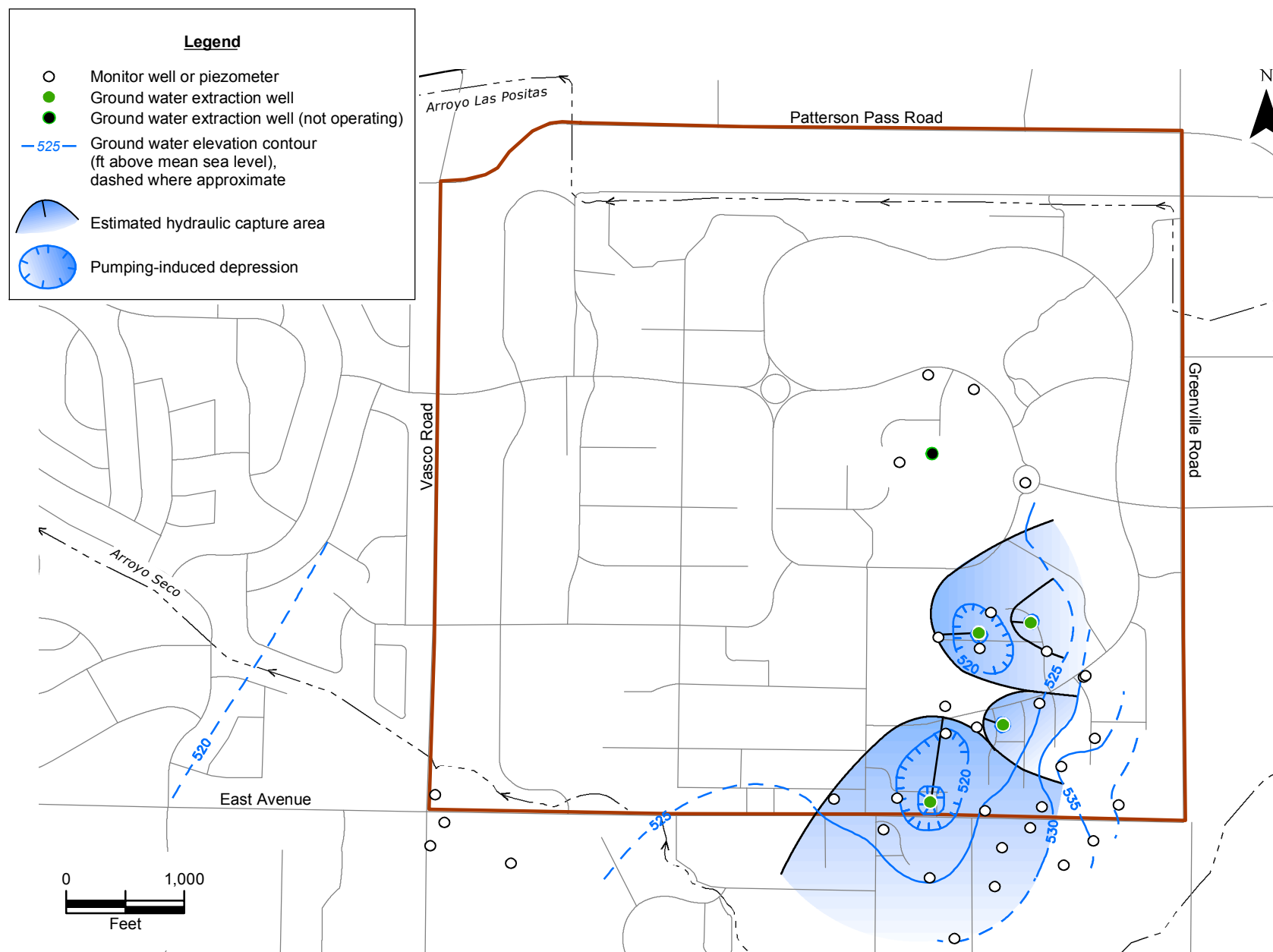




**Figure 5. Ground water elevation contour map based on 29 wells completed within HSU-3B showing estimated hydraulic capture areas, LLNL and vicinity, January 2010.**



**Figure 6. Ground water elevation contour map based on 36 wells completed within HSU-4 showing estimated hydraulic capture areas, LLNL and vicinity, January 2010.**



**Figure 7. Ground water elevation contour map based on 39 wells completed within HSU-5 showing estimated hydraulic capture areas, LLNL and vicinity, January 2010.**